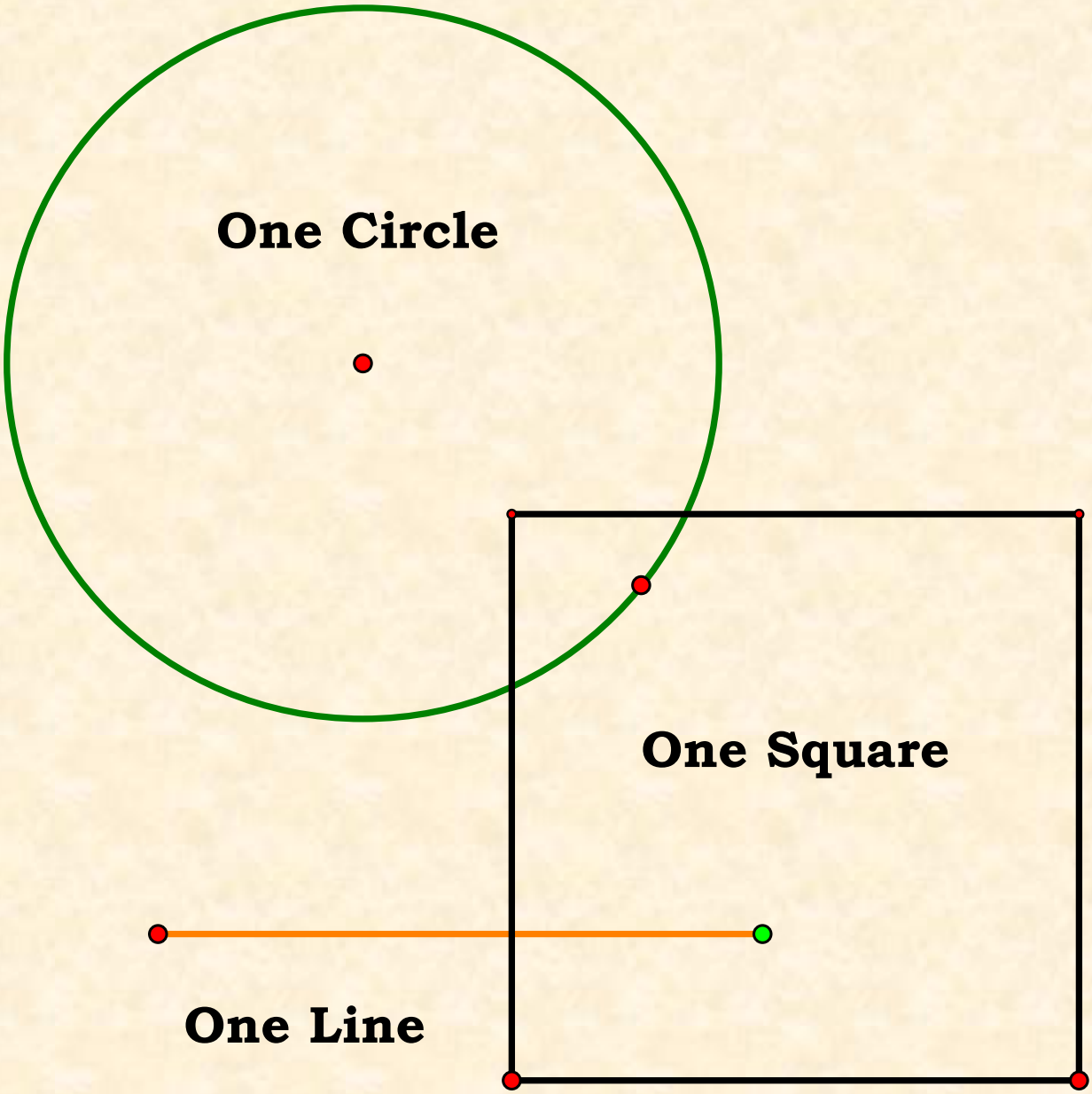
Box's Laws



By John Clark

$Unit = 1.00000$

$A = 1.45491$

$B = 1.00000$

$C = -0.31267$

$D = -1.00000$

$D - C = -0.68733$

$B + C = 0.68733$

$$\frac{B}{D - C} = -1.45491$$

$$\frac{B}{B + C} = 1.45491$$

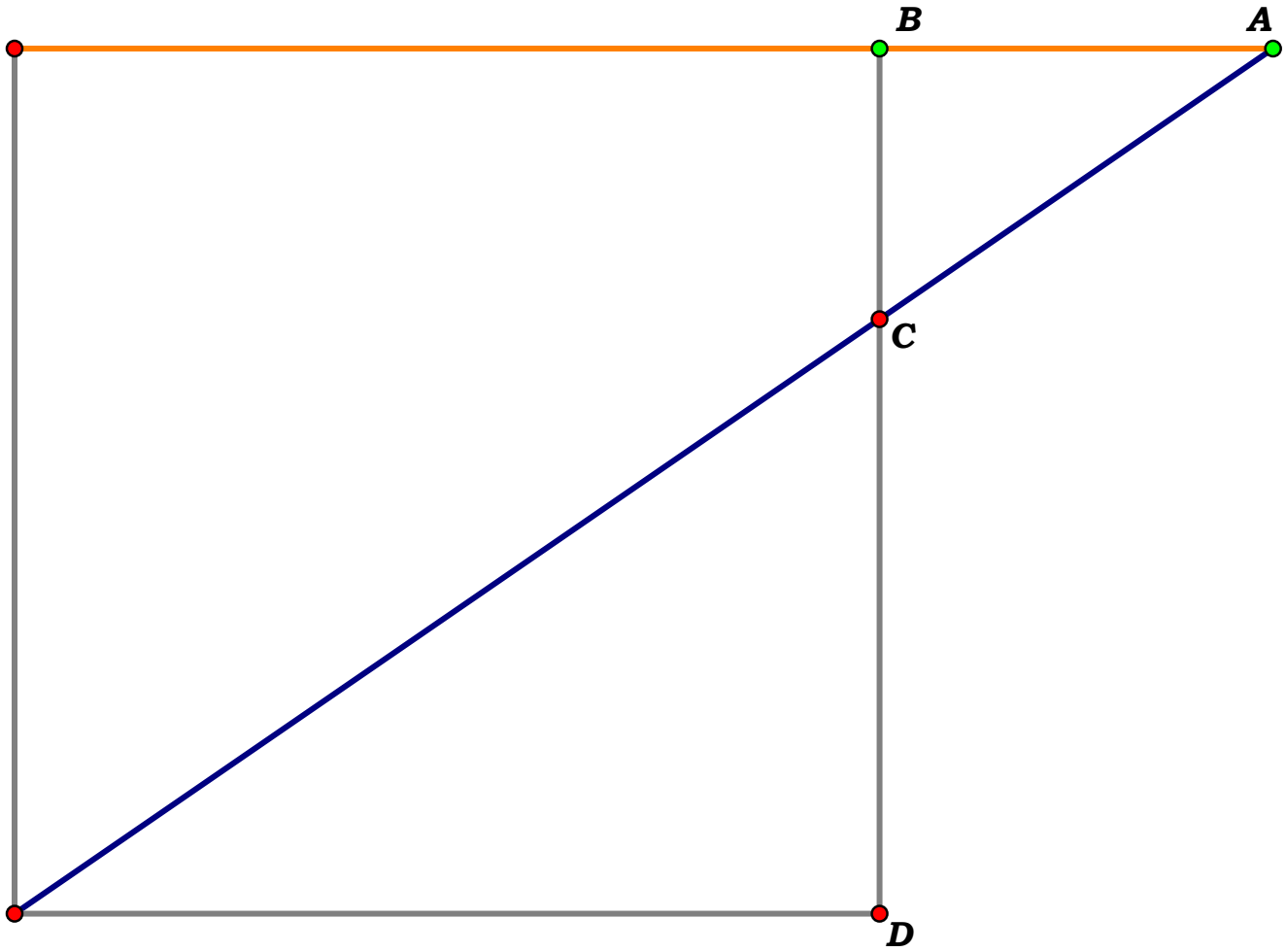
$$\frac{A}{\frac{B}{D - C}} = -1.00000$$

$$\frac{A}{\frac{B}{B + C}} = 1.00000$$

$$\frac{A}{B} = 1.45491$$

$$\frac{D}{D - C} = 1.45491$$

$$\frac{A}{B} - \frac{D}{D - C} = 0.00000$$



$Unit = 1.00000$

$A = -1.04260$

$B = 1.00000$

$C = -1.95914$

$D = -1.00000$

$D - C = 0.95914$

$B + C = -0.95914$

$$\frac{B}{D - C} = 1.04260$$

$$\frac{B}{B + C} = -1.04260$$

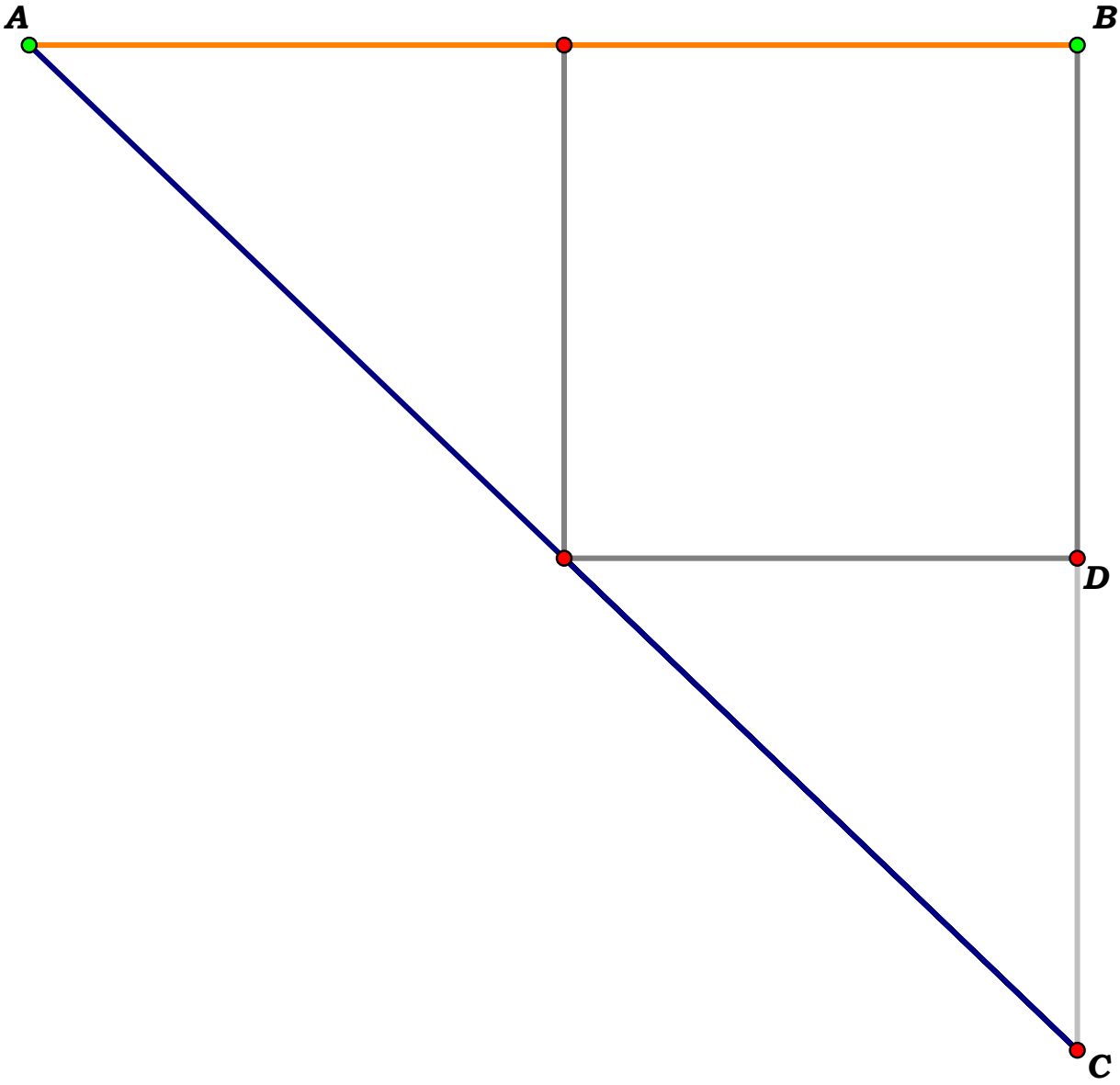
$$\frac{A}{\frac{B}{D - C}} = -1.00000$$

$$\frac{A}{\frac{B}{B + C}} = 1.00000$$

$$\frac{A}{B} = -1.04260$$

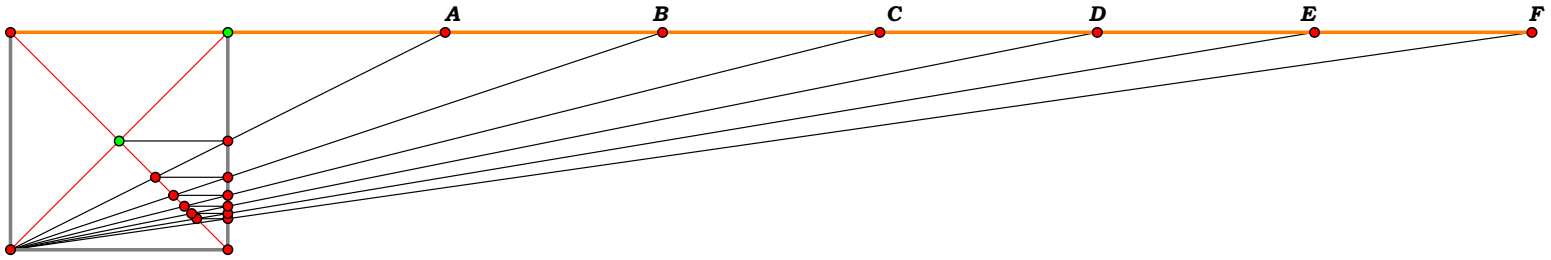
$$\frac{D}{D - C} = -1.04260$$

$$\frac{A}{B} - \frac{D}{D - C} = 0.00000$$



Unit **= 1.00000**

A **= 2.00000**
B **= 3.00000**
C **= 4.00000**
D **= 5.00000**
E **= 6.00000**
F **= 7.00000**



$Unit = 1.00000$

$A = 1.00000$

$B = 0.50000$

$C = 0.33333$

$D = 0.25000$

$E = 0.20000$

$F = 0.16667$

$G = 0.14286$

$H = 0.12500$

$\frac{A}{A} = 1.00000$

$\frac{A}{B} = 2.00000$

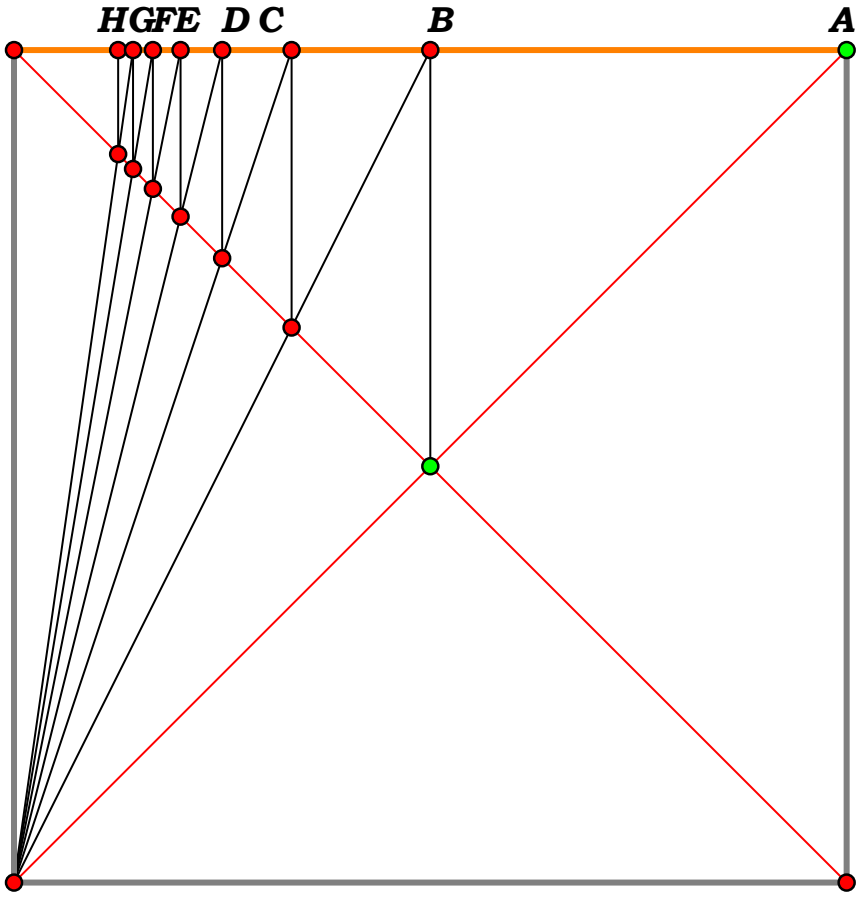
$\frac{A}{C} = 3.00000$

$\frac{A}{D} = 4.00000$

$\frac{A}{E} = 5.00000$

$\frac{A}{F} = 6.00000$

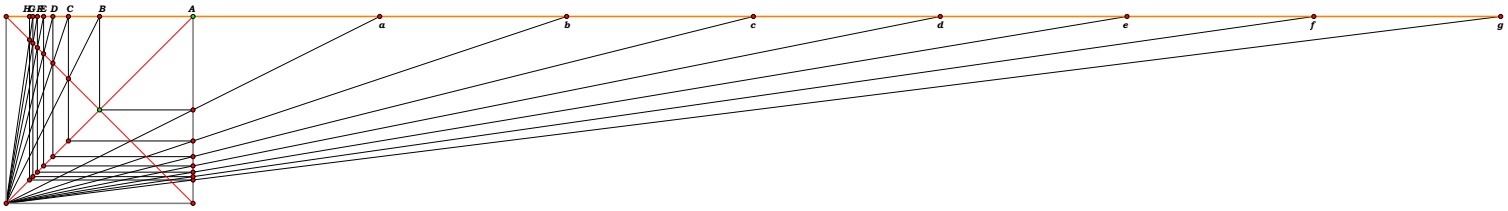
$\frac{A}{G} = 7.00000$



$A = 1.00000$
$B = 0.50000$
$C = 0.33333$
$D = 0.25000$
$E = 0.20000$
$F = 0.16667$
$G = 0.14286$
$H = 0.12500$

$\frac{A}{A} = 1.00000$
$\frac{A}{B} = 2.00000$
$\frac{A}{C} = 3.00000$
$\frac{A}{D} = 4.00000$
$\frac{A}{E} = 5.00000$
$\frac{A}{F} = 6.00000$
$\frac{A}{G} = 7.00000$

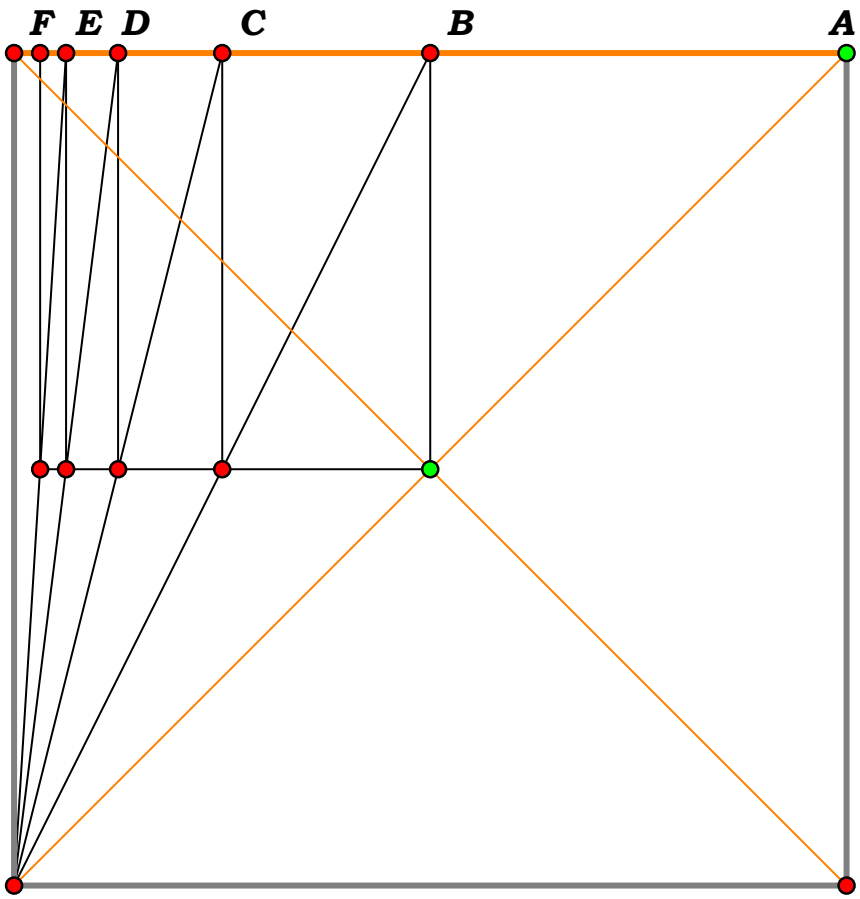
$a = 2.00000$
$b = 3.00000$
$c = 4.00000$
$d = 5.00000$
$e = 6.00000$
$f = 7.00000$
$g = 8.00000$



$A = 1.00000$
$B = 0.50000$
$C = 0.25000$
$D = 0.12500$
$E = 0.06250$
$F = 0.03125$

$\frac{A}{B} = 2.00000$
$\frac{A}{C} = 4.00000$
$\frac{A}{D} = 8.00000$
$\frac{A}{E} = 16.00000$
$\frac{A}{F} = 32.00000$

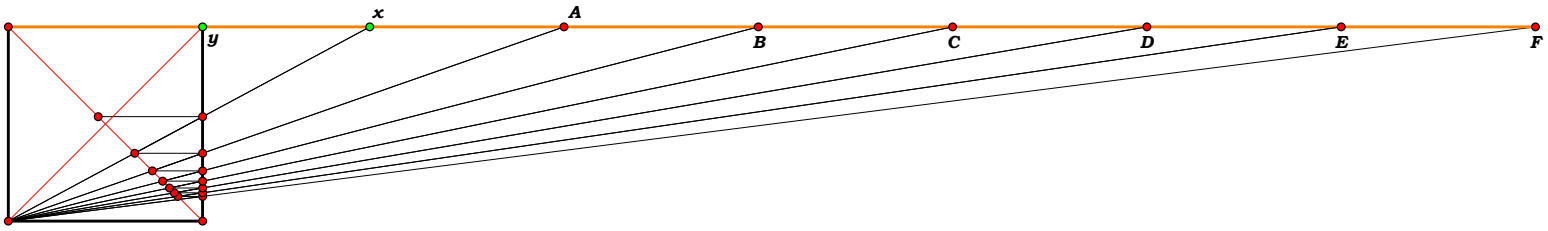
$\frac{A}{C} - \frac{A^2}{B} = 0.00000$
$\frac{A}{D} - \frac{A^3}{B} = 0.00000$
$\frac{A}{E} - \frac{A^4}{B} = 0.00000$
$\frac{A}{F} - \frac{A^5}{B} = 0.00000$

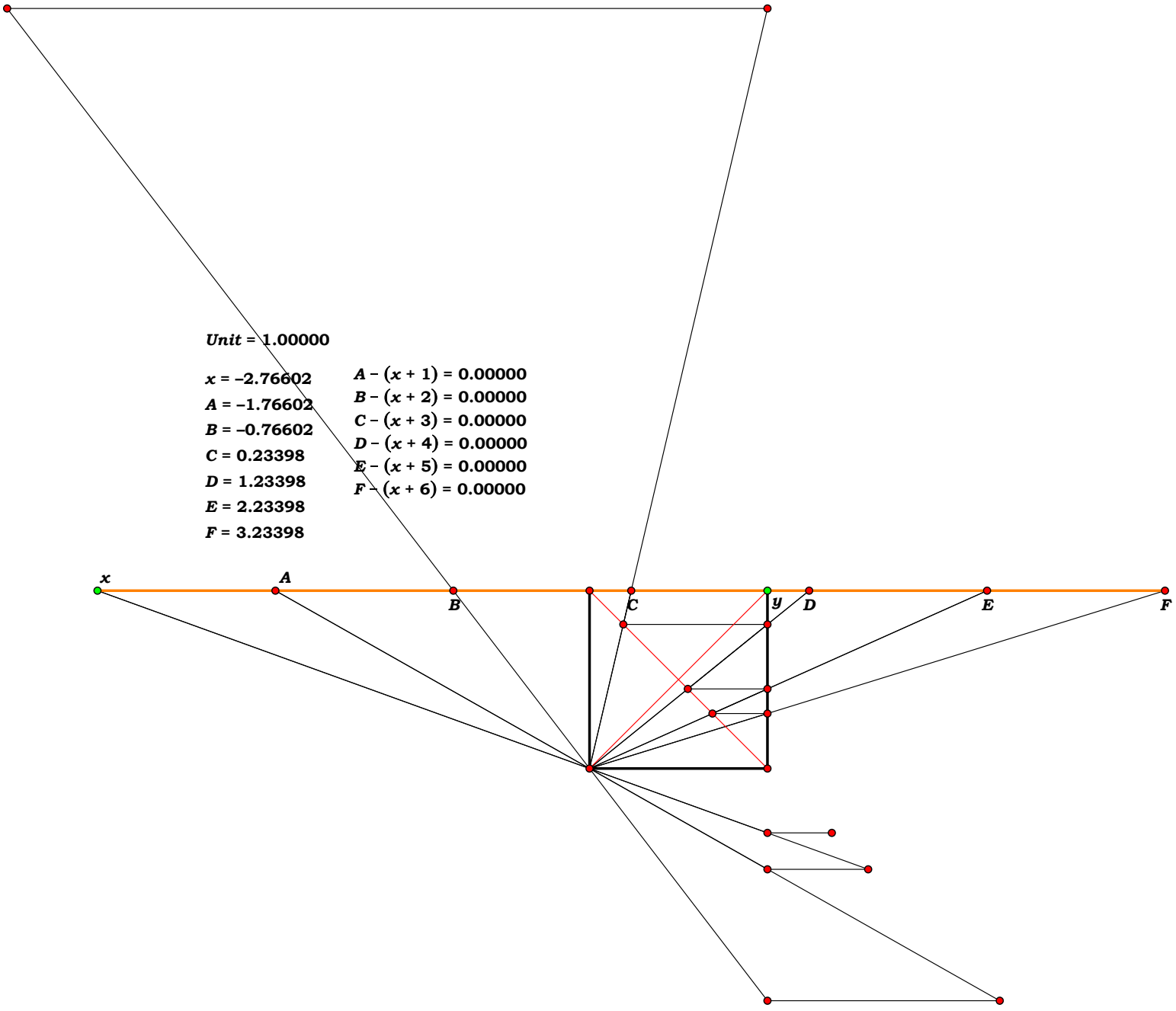


Unit = 1.00000

$x = 1.86020$
$A = 2.86020$
$B = 3.86020$
$C = 4.86020$
$D = 5.86020$
$E = 6.86020$
$F = 7.86020$

$A - (x + 1) = 0.00000$
$B - (x + 2) = 0.00000$
$C - (x + 3) = 0.00000$
$D - (x + 4) = 0.00000$
$E - (x + 5) = 0.00000$
$F - (x + 6) = 0.00000$




Unit = 1.00000
x = –2.76602
A = –1.76602
B = –0.76602
C = 0.23398
D = 1.23398
E = 2.23398
F = 3.23398
A – (x + 1) = 0.00000
B – (x + 2) = 0.00000
C – (x + 3) = 0.00000
D – (x + 4) = 0.00000
E – (x + 5) = 0.00000
F – (x + 6) = 0.00000
x
A
B
C
y
D
E
F

Unit = 1.00000

x = 1.78198

A = 2.78198

B = 4.34215

C = 6.78042

D = 10.58541

E = 16.52268

F = 25.79946

$x + 1$ = 2.78198

$A - \frac{(x+1)^1}{x^1} = 0.00000$

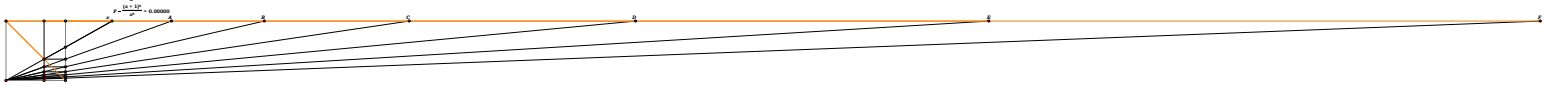
$B - \frac{(x+1)^2}{x^2} = 0.00000$

$C - \frac{(x+1)^3}{x^3} = 0.00000$

$D - \frac{(x+1)^4}{x^4} = 0.00000$

$E - \frac{(x+1)^5}{x^5} = 0.00000$

$F - \frac{(x+1)^6}{x^6} = 0.00000$



$Unit = 1.00000$

$x = -0.43572$

$A = 0.56428$

$B = -0.73076$

$C = 0.94636$

$D = -1.22557$

$E = 1.58716$

$F = -2.05543$

$x + 1 = 0.56428$

$$A - \frac{(x+1)^1}{x^0} = 0.00000$$

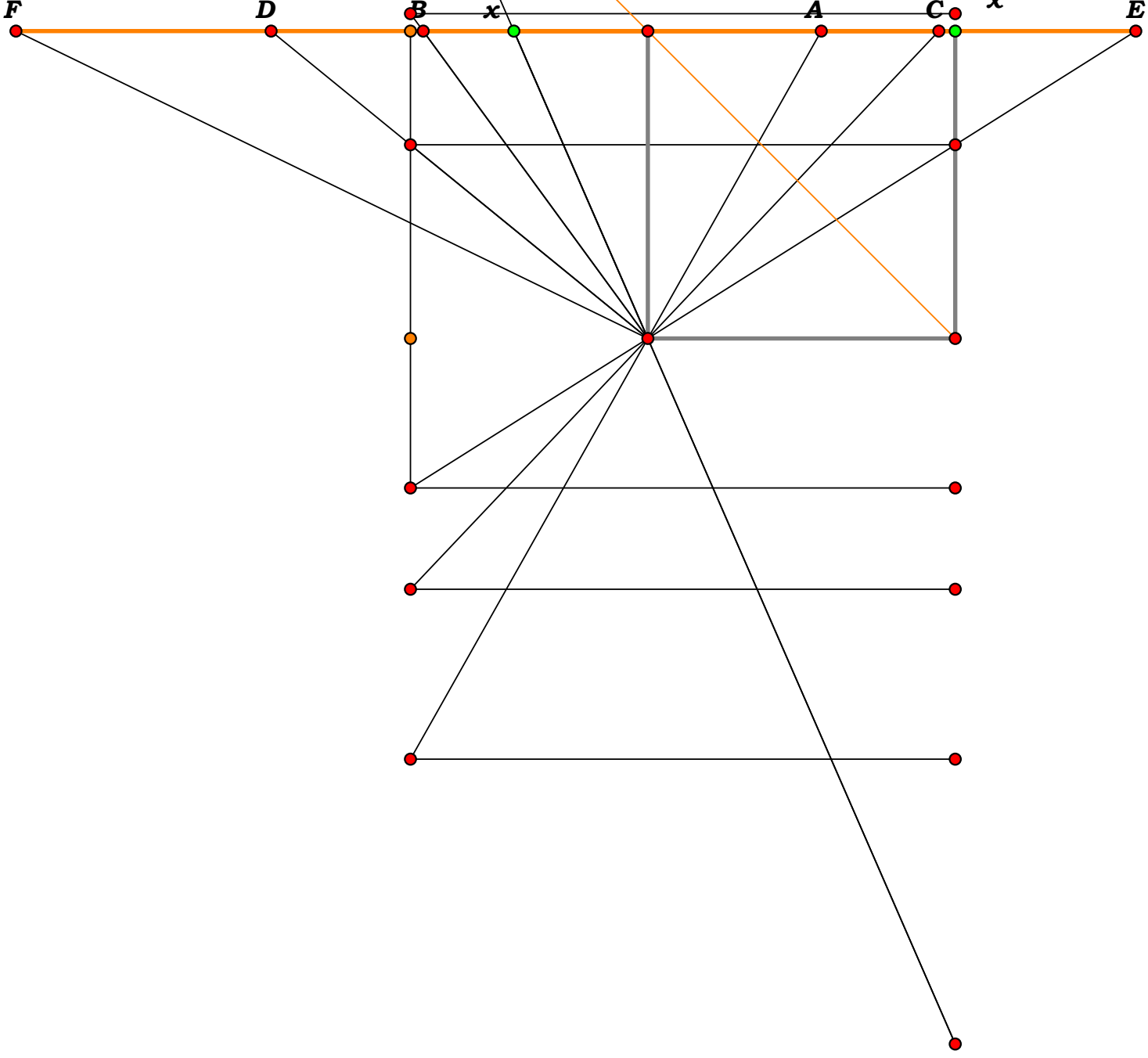
$$B - \frac{(x+1)^2}{x^1} = 0.00000$$

$$C - \frac{(x+1)^3}{x^2} = 0.00000$$

$$D - \frac{(x+1)^4}{x^3} = 0.00000$$

$$E - \frac{(x+1)^5}{x^4} = 0.00000$$

$$F - \frac{(x+1)^6}{x^5} = 0.00000$$



$Unit = 1.00000$

$x = 1.51503$

$A = 0.60239$

$B = 0.37593$

$C = 0.27322$

$D = 0.21459$

$E = 0.17668$

$F = 0.15015$

$$A - \frac{x}{x + 1} = 0.00000$$

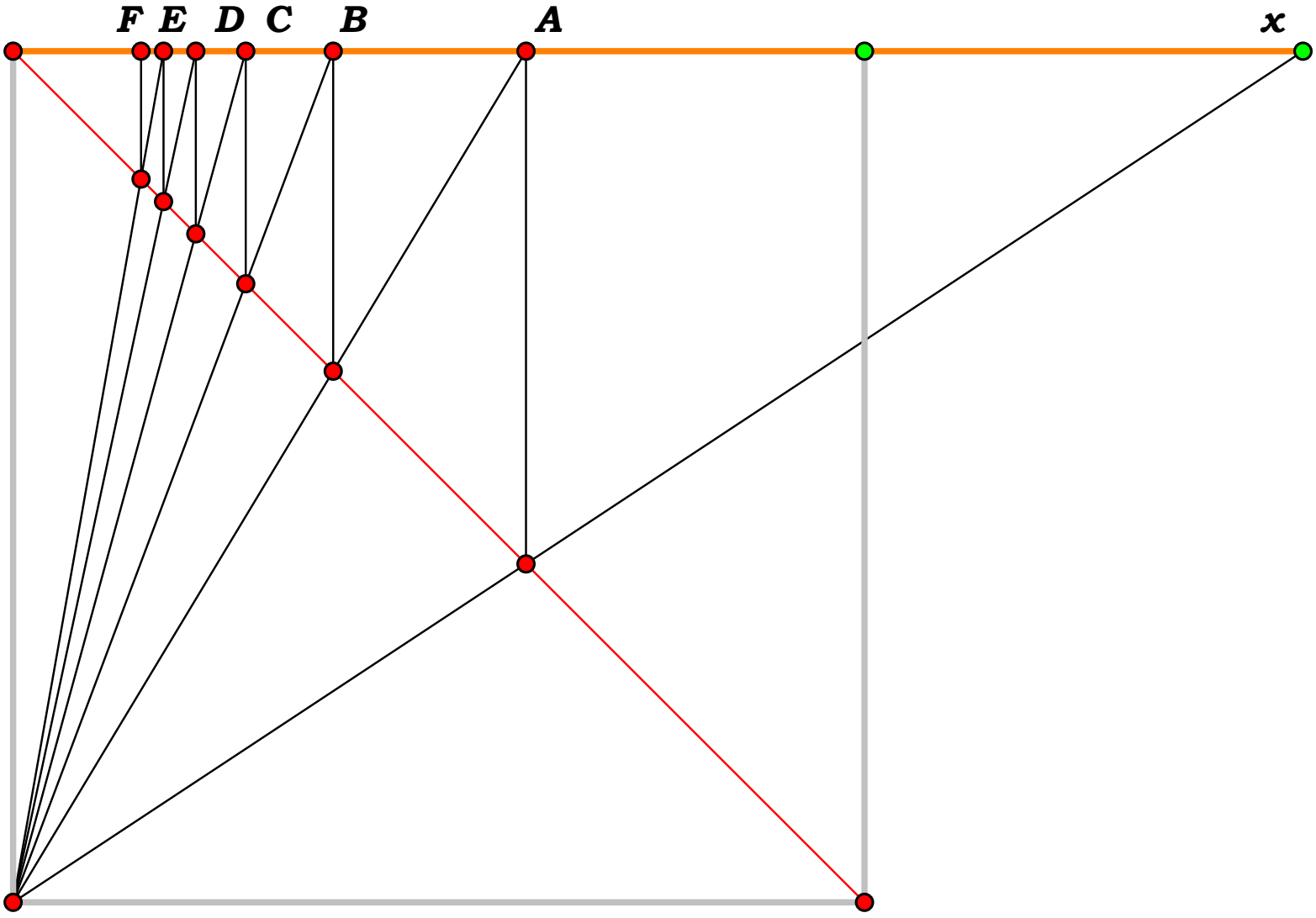
$$B - \frac{x}{2 \cdot x + 1} = 0.00000$$

$$C - \frac{x}{3 \cdot x + 1} = 0.00000$$

$$D - \frac{x}{4 \cdot x + 1} = 0.00000$$

$$E - \frac{x}{5 \cdot x + 1} = 0.00000$$

$$F - \frac{x}{6 \cdot x + 1} = 0.00000$$



$Unit = 1.00000$

$x = -1.43664$

$A = 3.29022$

$B = 0.76691$

$C = 0.43404$

$D = 0.30267$

$E = 0.23235$

$F = 0.18854$

$$A - \frac{x}{x+1} = 0.00000$$

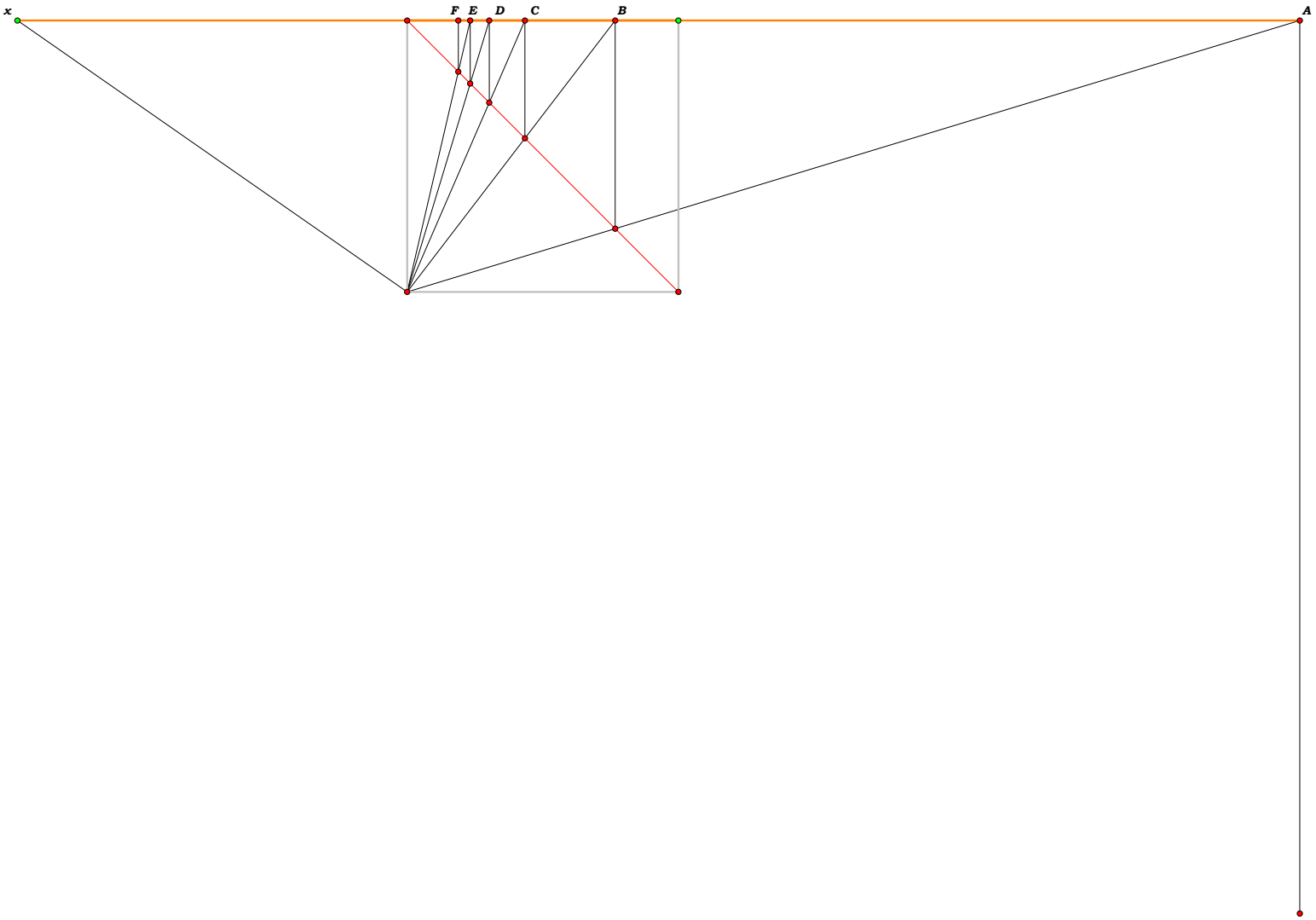
$$B - \frac{x}{2 \cdot x+1} = 0.00000$$

$$C - \frac{x}{3 \cdot x+1} = 0.00000$$

$$D - \frac{x}{4 \cdot x+1} = 0.00000$$

$$E - \frac{x}{5 \cdot x+1} = 0.00000$$

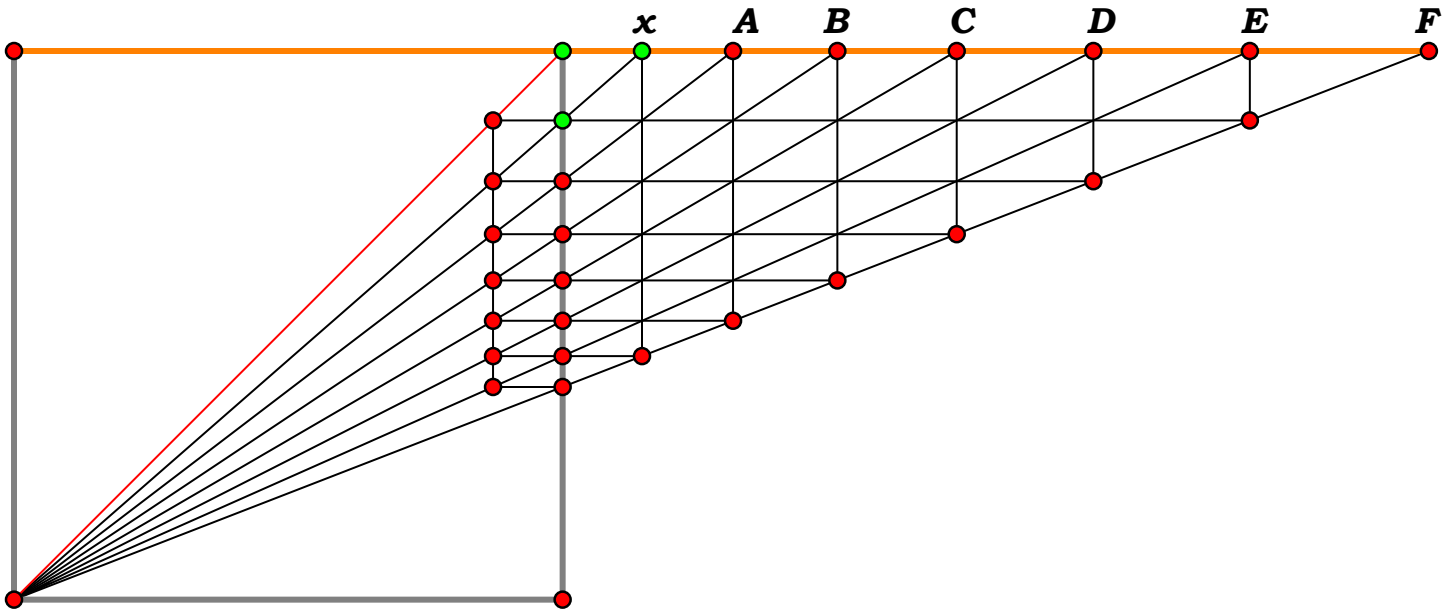
$$F - \frac{x}{6 \cdot x+1} = 0.00000$$

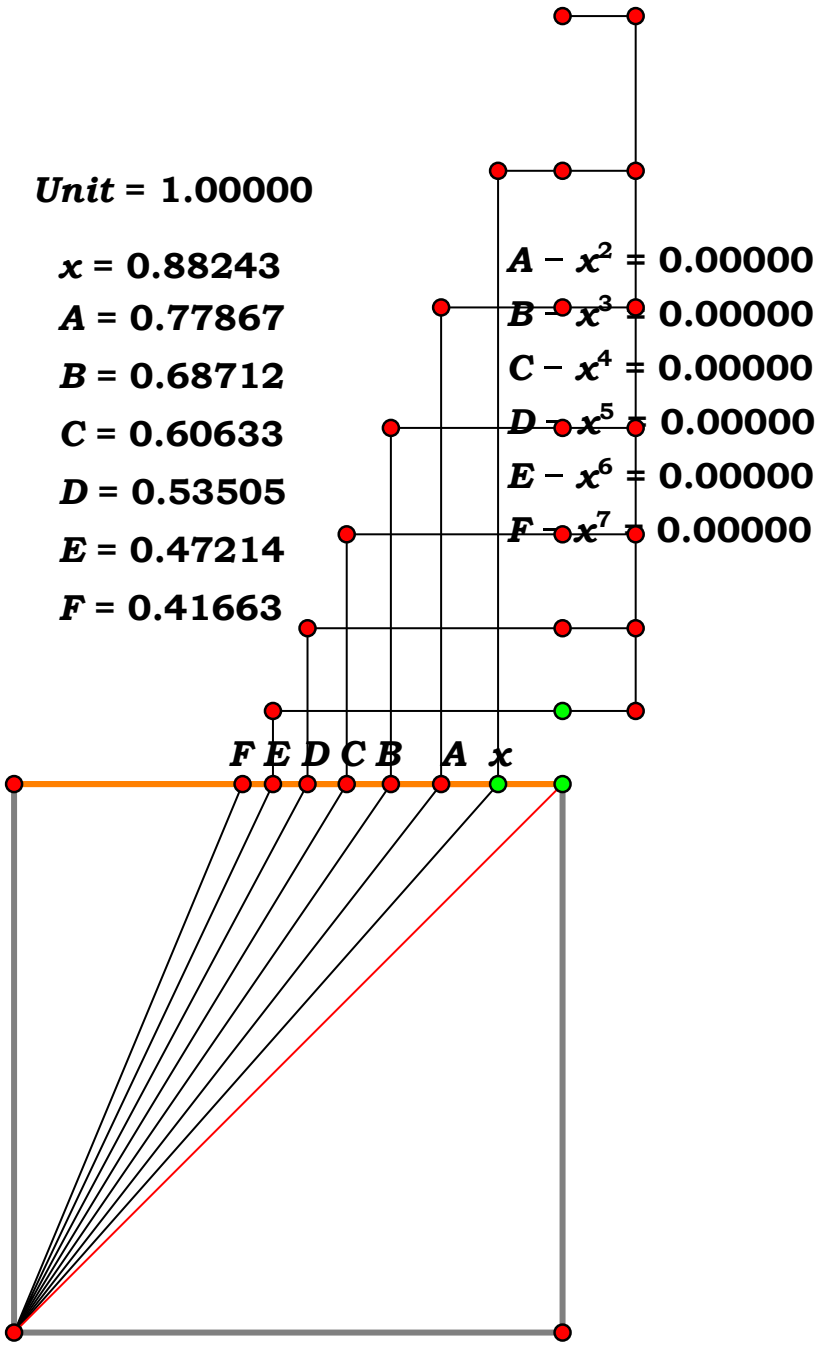


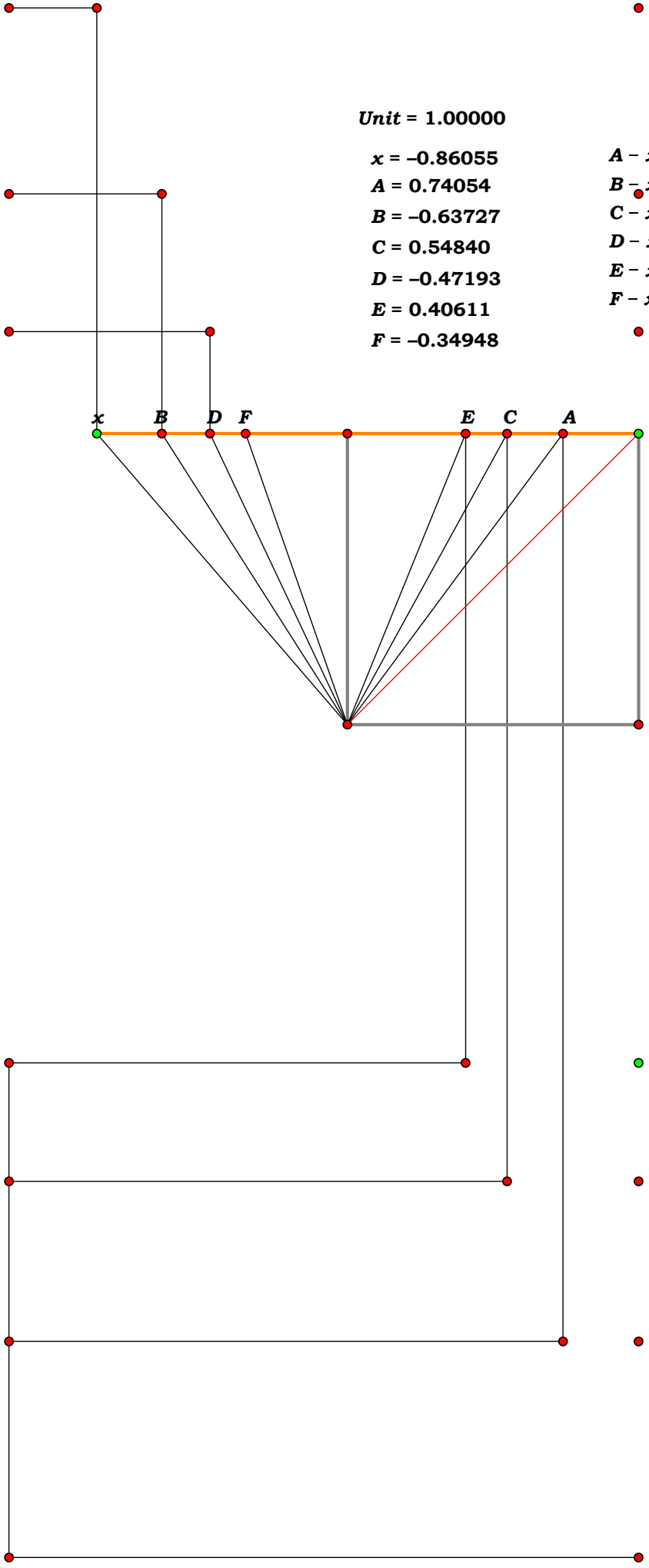
$Unit = 1.00000$

$x = 1.14497$
$A = 1.31095$
$B = 1.50099$
$C = 1.71858$
$D = 1.96771$
$E = 2.25296$
$F = 2.57957$

$A - x^2 = 0.00000$
$B - x^3 = 0.00000$
$C - x^4 = 0.00000$
$D - x^5 = 0.00000$
$E - x^6 = 0.00000$
$F - x^7 = 0.00000$




Unit = 1.00000
x = 0.88243
A = 0.77867
B = 0.68712
C = 0.60633
D = 0.53505
E = 0.47214
F = 0.41663
A − x² = 0.00000
B − x³ = 0.00000
C − x⁴ = 0.00000
D − x⁵ = 0.00000
E − x⁶ = 0.00000
F − x⁷ = 0.00000
F E D C B A x


Unit = 1.00000
x = –0.86055
A = 0.74054
B = –0.63727
C = 0.54840
D = –0.47193
E = 0.40611
F = –0.34948
A – x^2 = 0.00000
B – x^3 = 0.00000
C – x^4 = 0.00000
D – x^5 = 0.00000
E – x^6 = 0.00000
F – x^7 = 0.00000
x
B
D
F
E
C
A

$$Unit = 1.00000$$

$$x = 1.38171$$

$$A = 0.72374$$

$$B = 0.52380$$

$$C = 0.37910$$

$$D = 0.27437$$

$$E = 0.19857$$

$$F = 0.14371$$

$$A - \frac{1}{x} = 0.00000$$

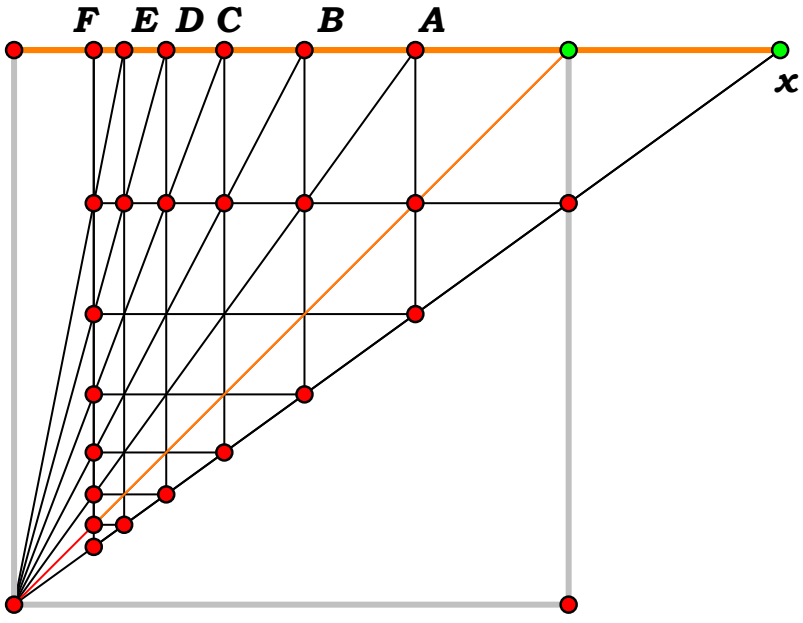
$$B - \frac{1}{x^2} = 0.00000$$

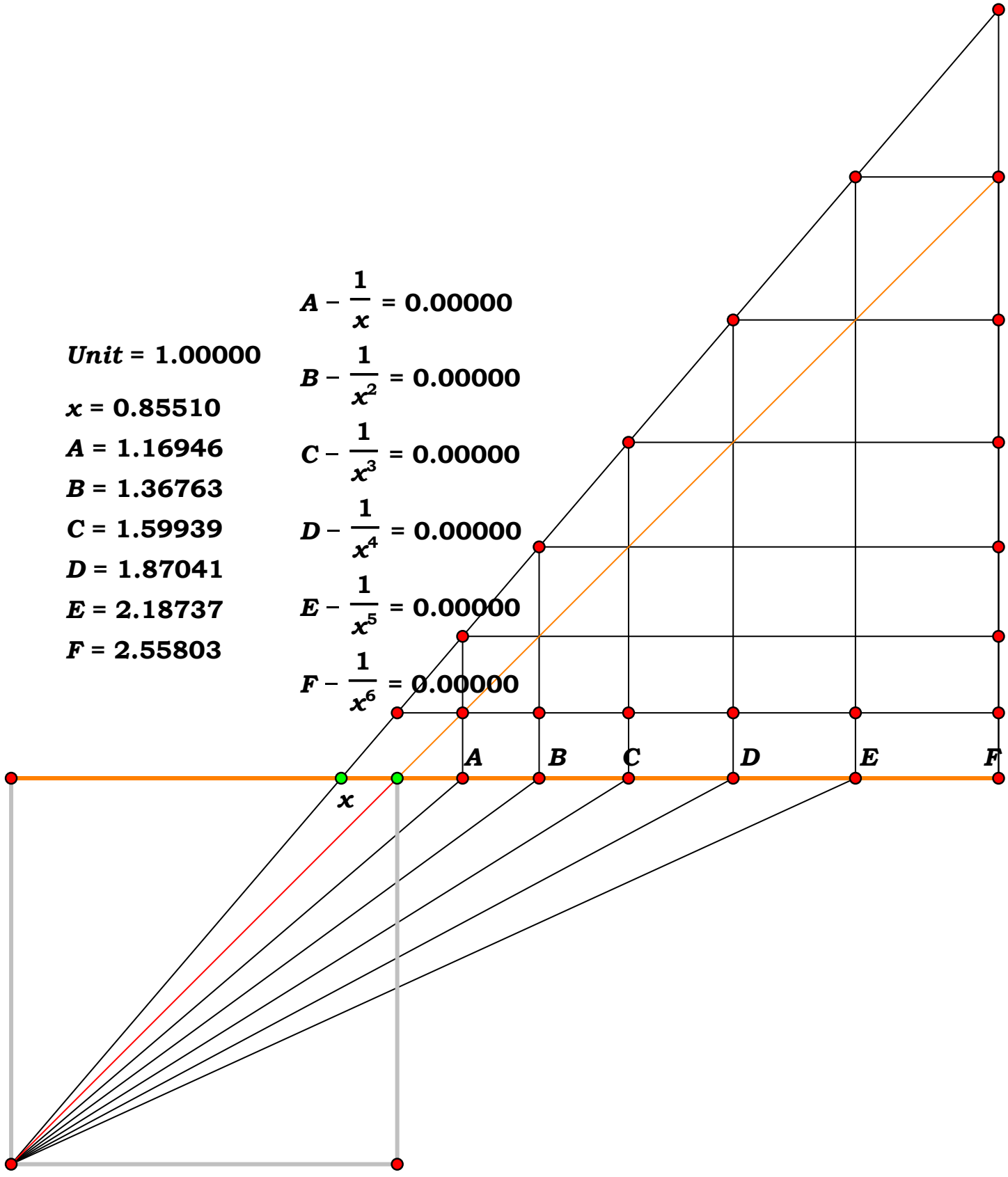
$$C - \frac{1}{x^3} = 0.00000$$

$$D - \frac{1}{x^4} = 0.00000$$

$$E - \frac{1}{x^5} = 0.00000$$

$$F - \frac{1}{x^6} = 0.00000$$




$A - \frac{1}{x} = 0.00000$
$B - \frac{1}{x^2} = 0.00000$
$C - \frac{1}{x^3} = 0.00000$
$D - \frac{1}{x^4} = 0.00000$
$E - \frac{1}{x^5} = 0.00000$
$F - \frac{1}{x^6} = 0.00000$
Unit = 1.00000
x = 0.85510
A = 1.16946
B = 1.36763
C = 1.59939
D = 1.87041
E = 2.18737
F = 2.55803
A
B
C
D
E
F
x

$Unit = 1.00000$

$x = -1.21167$

$A = -0.82530$

$B = 0.68113$

$C = -0.56214$

$D = 0.46394$

$E = -0.38289$

$F = 0.31600$

$$A - \frac{1}{x} = 0.00000$$

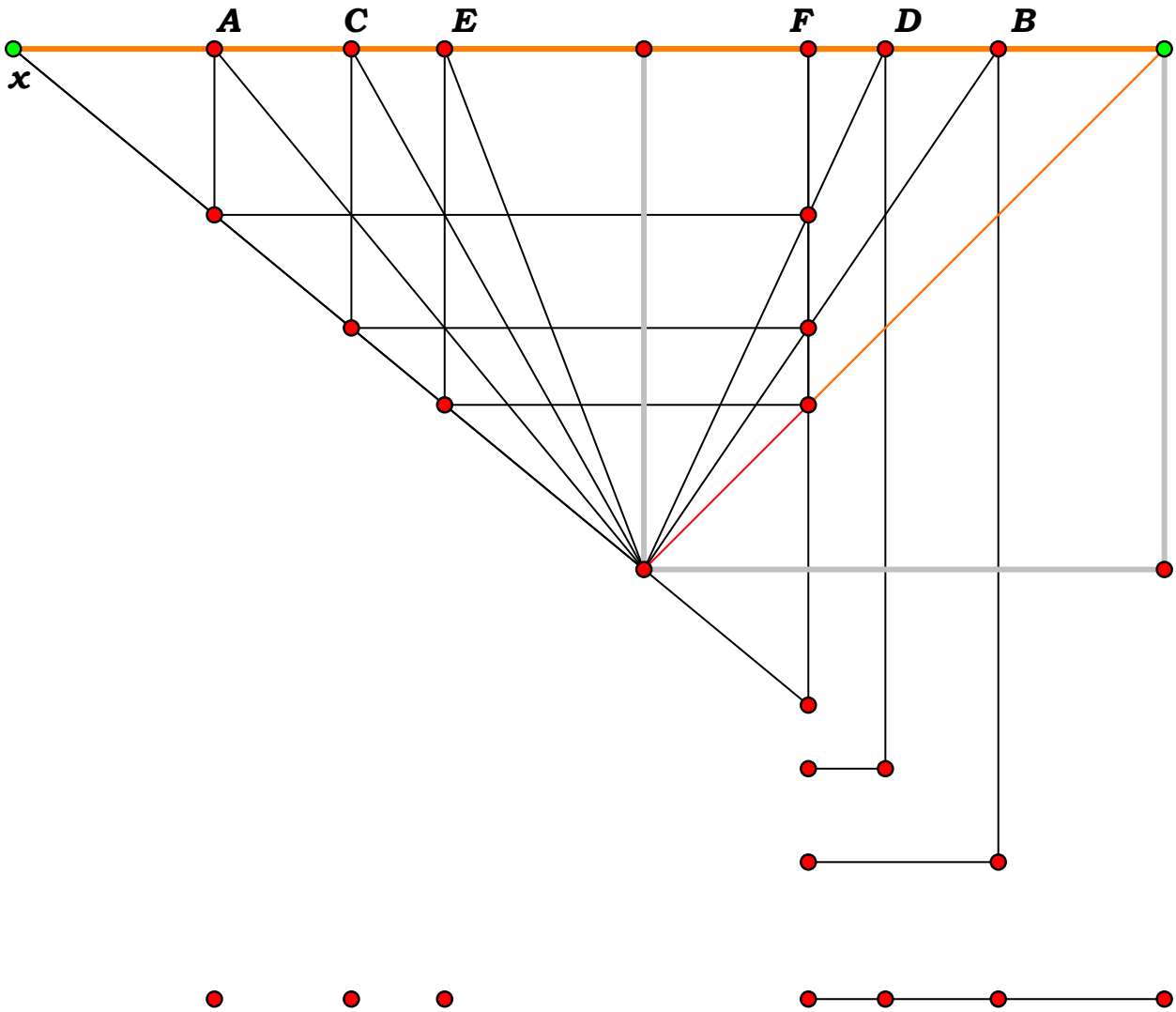
$$B - \frac{1}{x^2} = 0.00000$$

$$C - \frac{1}{x^3} = 0.00000$$

$$D - \frac{1}{x^4} = 0.00000$$

$$E - \frac{1}{x^5} = 0.00000$$

$$F - \frac{1}{x^6} = 0.00000$$



$Unit = 1.00000$

$x = 2.61267$

$A = 0.85350$

$B = 1.17164$

$C = 1.38275$

$D = 1.62009$

$E = 1.61267$

$F = 1.88947$

$G = 2.22992$

$H = 3.61267$

$$A - \frac{x^2 - 1}{x^2} = 0.00000$$

$$B - \frac{x^2}{x^2 - 1} = 0.00000$$

$$C - \frac{x + 1}{x} = 0.00000$$

$$D - \frac{x}{x - 1} = 0.00000$$

$$E - (x - 1) = 0.00000$$

$$F - \frac{x^2}{x + 1} = 0.00000$$

$$G - \frac{x^2 - 1}{x} = 0.00000$$

$$H - (x + 1) = 0.00000$$

$$B - \frac{1}{A} = 0.00000$$

$$\frac{1}{C} = 0.72320$$

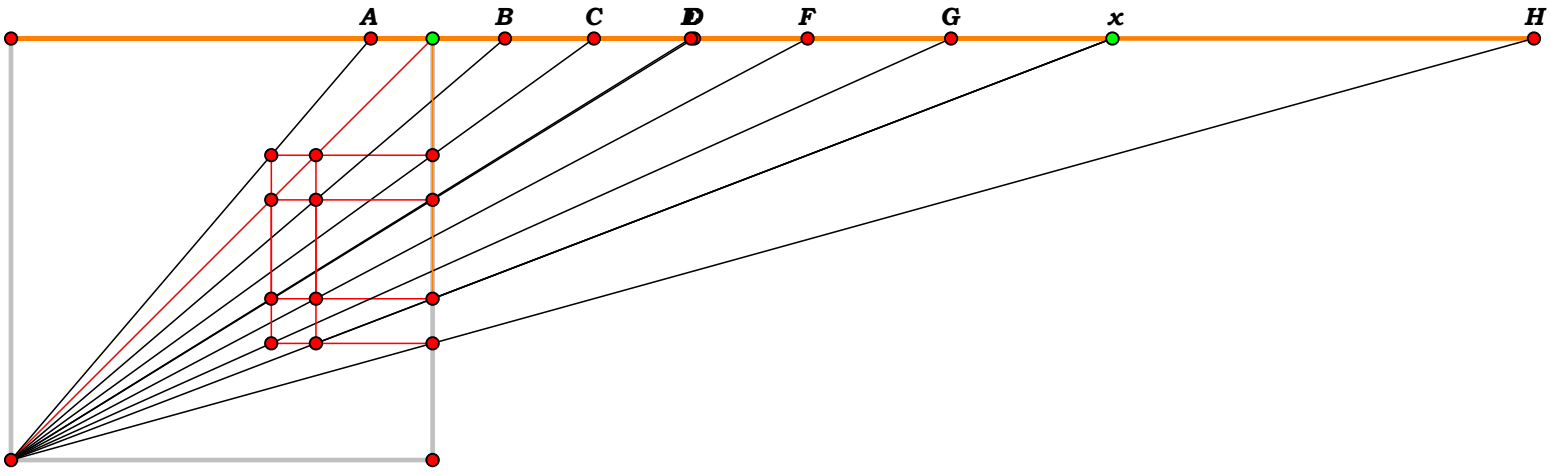
$$\frac{1}{D} - \frac{x - 1}{x} = 0.00000$$

$$\frac{1}{E} - \frac{1}{x - 1} = 0.00000$$

$$\frac{1}{F} - \frac{x + 1}{x^2} = 0.00000$$

$$\frac{1}{G} - \frac{x}{x^2 - 1} = 0.00000$$

$$\frac{1}{H} - \frac{1}{x + 1} = 0.00000$$



$Unit = 1.00000$

$x = -0.73727$

$A = -0.83971$

$B = -1.19088$

$C = -0.35636$

$D = 0.42438$

$E = -1.73727$

$F = 2.06888$

$G = 0.61909$

$H = 0.26273$

$$A - \frac{x^2 - 1}{x^2} = 0.00000$$

$$B - \frac{x^2}{x^2 - 1} = 0.00000$$

$$C - \frac{x + 1}{x} = 0.00000$$

$$D - \frac{x}{x - 1} = 0.00000$$

$$E - (x - 1) = 0.00000$$

$$F - \frac{x^2}{x + 1} = 0.00000$$

$$G - \frac{x^2 - 1}{x} = 0.00000$$

$$H - (x + 1) = 0.00000$$

$$B - \frac{1}{A} = 0.00000$$

$$\frac{1}{C} = -2.80614$$

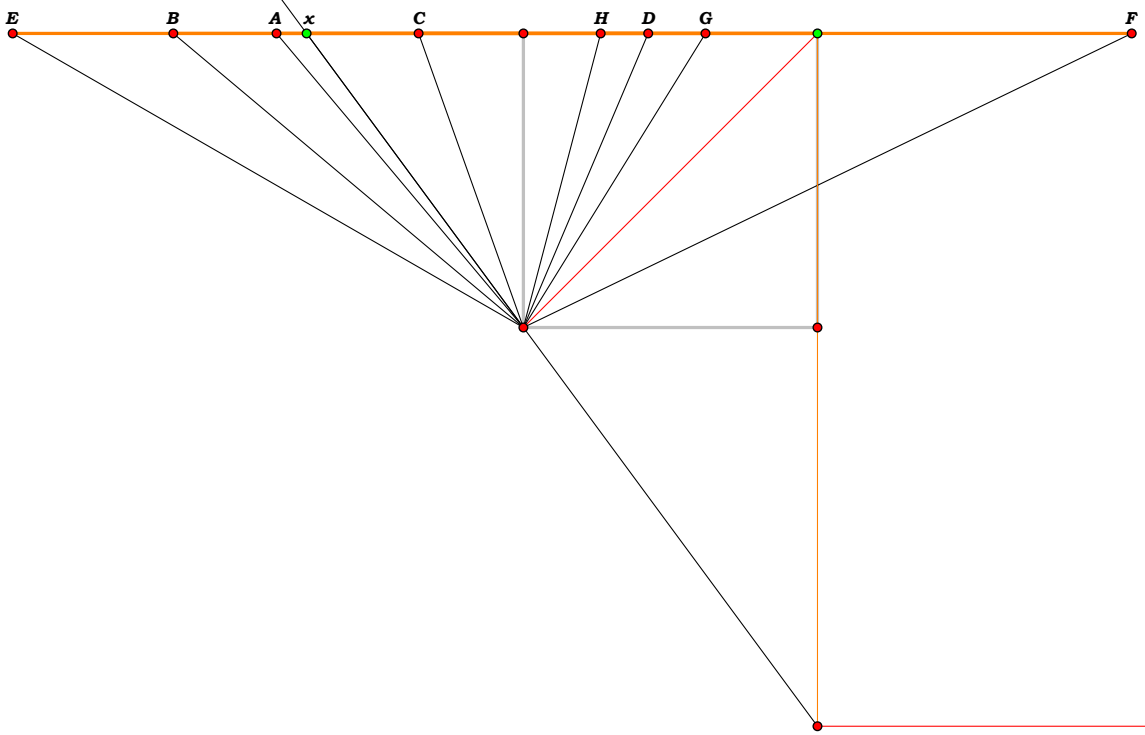
$$\frac{1}{D} - \frac{x - 1}{x} = 0.00000$$

$$\frac{1}{E} - \frac{1}{x - 1} = 0.00000$$

$$\frac{1}{F} - \frac{x + 1}{x^2} = 0.00000$$

$$\frac{1}{G} - \frac{x}{x^2 - 1} = 0.00000$$

$$\frac{1}{H} - \frac{1}{x + 1} = 0.00000$$



$Unit = 1.00000$

$x = 2.86674$

$A = 0.87832$

$B = 1.13854$

$C = 1.34883$

$D = 1.53569$

$E = 1.86674$

$F = 2.12535$

$G = 2.51791$

$H = 3.86674$

$A - \frac{x^2 - 1}{x^2} = 0.00000$

$B - \frac{x^2}{x^2 - 1} = 0.00000$

$C - \frac{x + 1}{x} = 0.00000$

$D - \frac{x}{x - 1} = 0.00000$

$E - (x - 1) = 0.00000$

$F - \frac{x^2}{x + 1} = 0.00000$

$G - \frac{x^2 - 1}{x} = 0.00000$

$H - (x + 1) = 0.00000$

$B - \frac{1}{A} = 0.00000$

$\frac{1}{C} = 0.74138$

$\frac{1}{D} - \frac{x - 1}{x} = 0.00000$

$\frac{1}{E} - \frac{1}{x - 1} = 0.00000$

$\frac{1}{F} - \frac{x + 1}{x^2} = 0.00000$

$\frac{1}{G} - \frac{x}{x^2 - 1} = 0.00000$

$\frac{1}{H} - \frac{1}{x + 1} = 0.00000$

$C_0 = 0.74138$

$D_0 = 0.65117$

$E_0 = 0.53569$

$F_0 = 0.47051$

$G_0 = 0.39716$

$x_0 = 0.34883$

$H_0 = 0.25862$

$C_0 - \frac{1}{C} = 0.00000$

$D_0 - \frac{1}{D} = 0.00000$

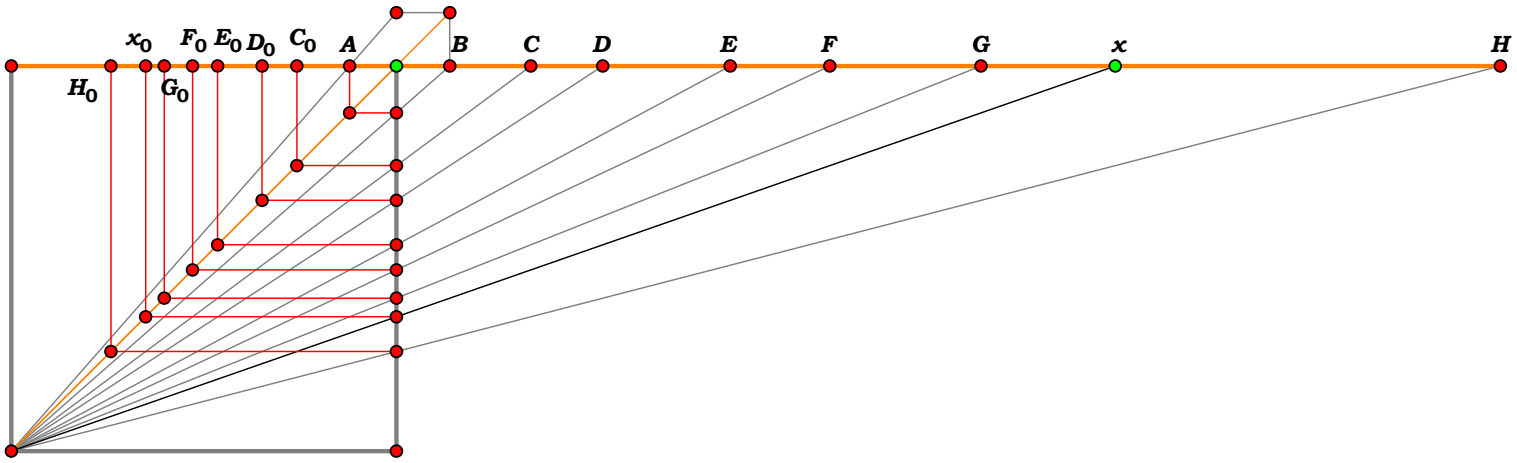
$E_0 - \frac{1}{E} = 0.00000$

$F_0 - \frac{1}{F} = 0.00000$

$G_0 - \frac{1}{G} = 0.00000$

$x_0 - \frac{1}{x} = 0.00000$

$H_0 - \frac{1}{H} = 0.00000$



$Unit = 1.00000$

$x = -2.14382$

$A = 0.78242$

$B = 1.27809$

$C = 0.53354$

$D = 0.68192$

$E = -3.14382$

$F = -4.01808$

$G = -1.67737$

$H = -1.14382$

$A - \frac{x^2 - 1}{x^2} = 0.00000$

$B - \frac{x^2}{x^2 - 1} = 0.00000$

$C - \frac{x + 1}{x} = 0.00000$

$D - \frac{x}{x - 1} = 0.00000$

$E - (x - 1) = 0.00000$

$F - \frac{x^2}{x + 1} = 0.00000$

$G - \frac{x^2 - 1}{x} = 0.00000$

$H - (x + 1) = 0.00000$

$B - \frac{1}{A} = 0.00000$

$\frac{1}{C} = 1.87426$

$\frac{1}{D} - \frac{x - 1}{x} = 0.00000$

$\frac{1}{E} - \frac{1}{x - 1} = 0.00000$

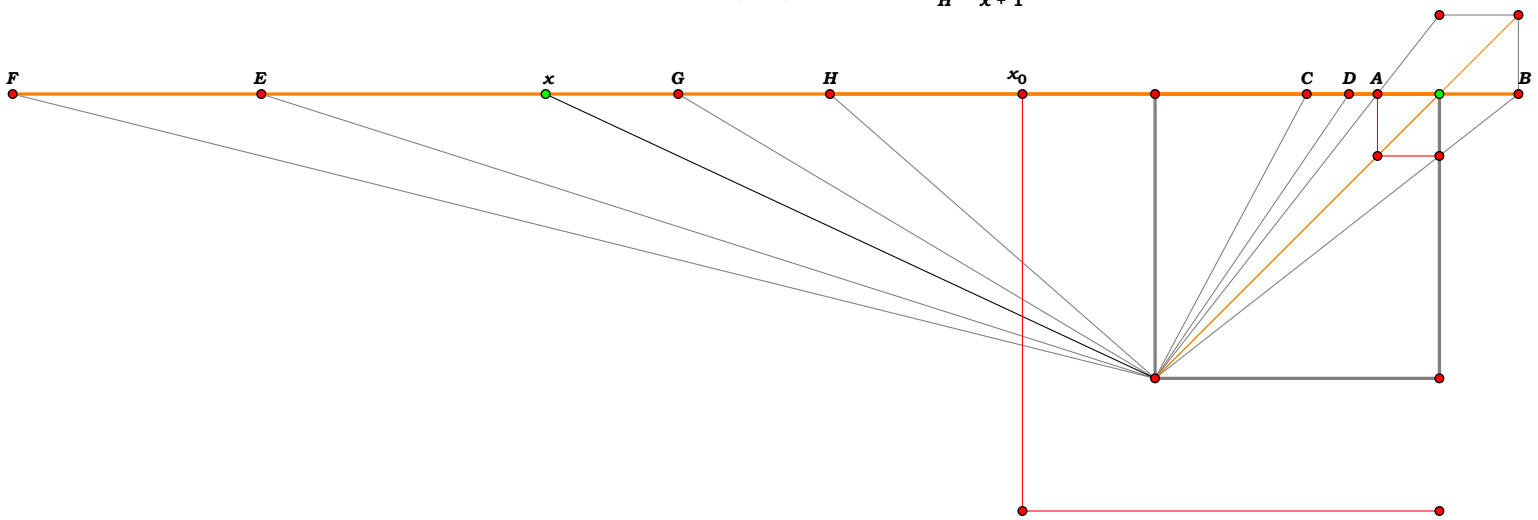
$\frac{1}{F} - \frac{x + 1}{x^2} = 0.00000$

$\frac{1}{G} - \frac{x}{x^2 - 1} = 0.00000$

$\frac{1}{H} - \frac{1}{x + 1} = 0.00000$

$x_0 = -0.46646$

$x_0 - \frac{1}{x} = 0.00000$



$Unit = 1.00000$

$x_E = -0.46231$

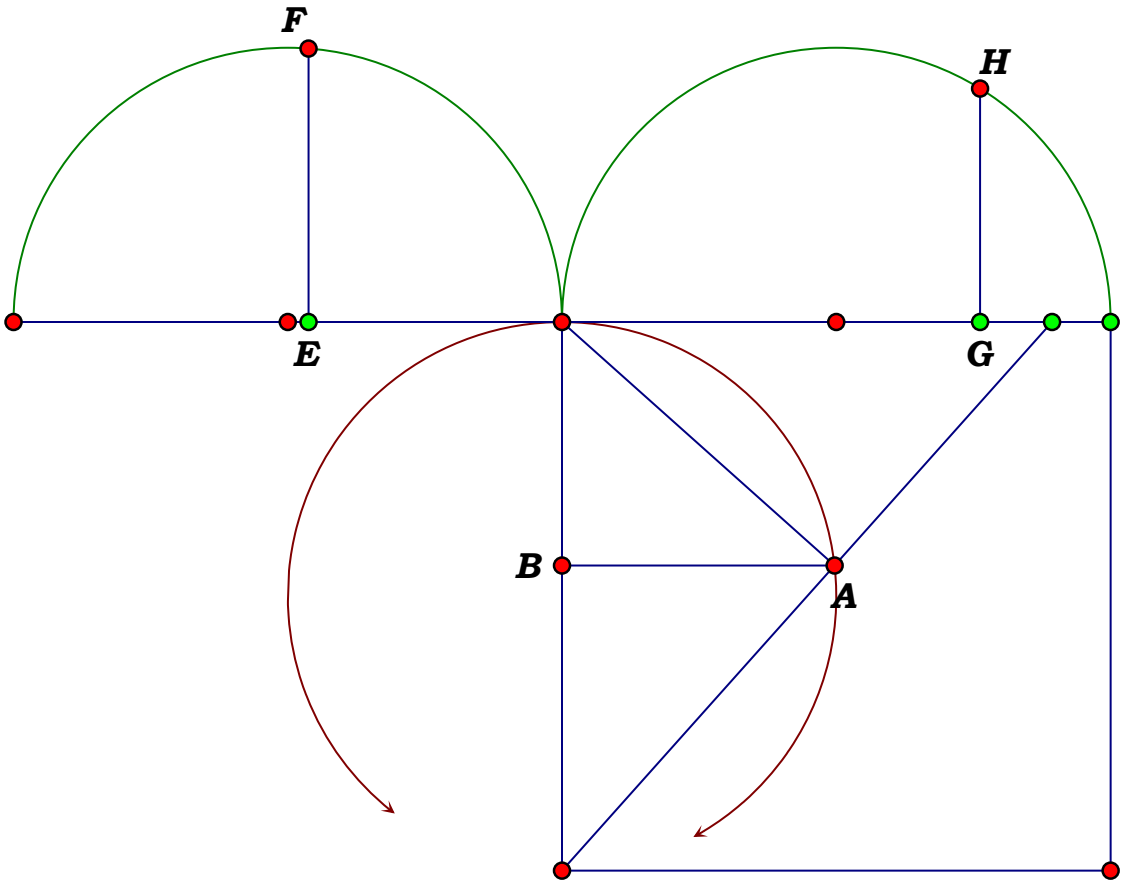
$y_F = 0.49858$

$\sqrt{x_E \cdot (-1 - x_E)} = 0.49858$

$x_G = 0.76220$

$y_H = 0.42574$

$\sqrt{x_G \cdot (1 - x_G)} = 0.42574$



$A = 0.49684$

$B = -0.44386$

$\frac{A}{\sqrt{A^2}} = 1.00000$

$A \cdot \frac{A}{\sqrt{A^2}} - \sqrt{B \cdot (-1 - B)} = 0.00000$

$Unit = 1.00000$

$x_E = -0.46231$

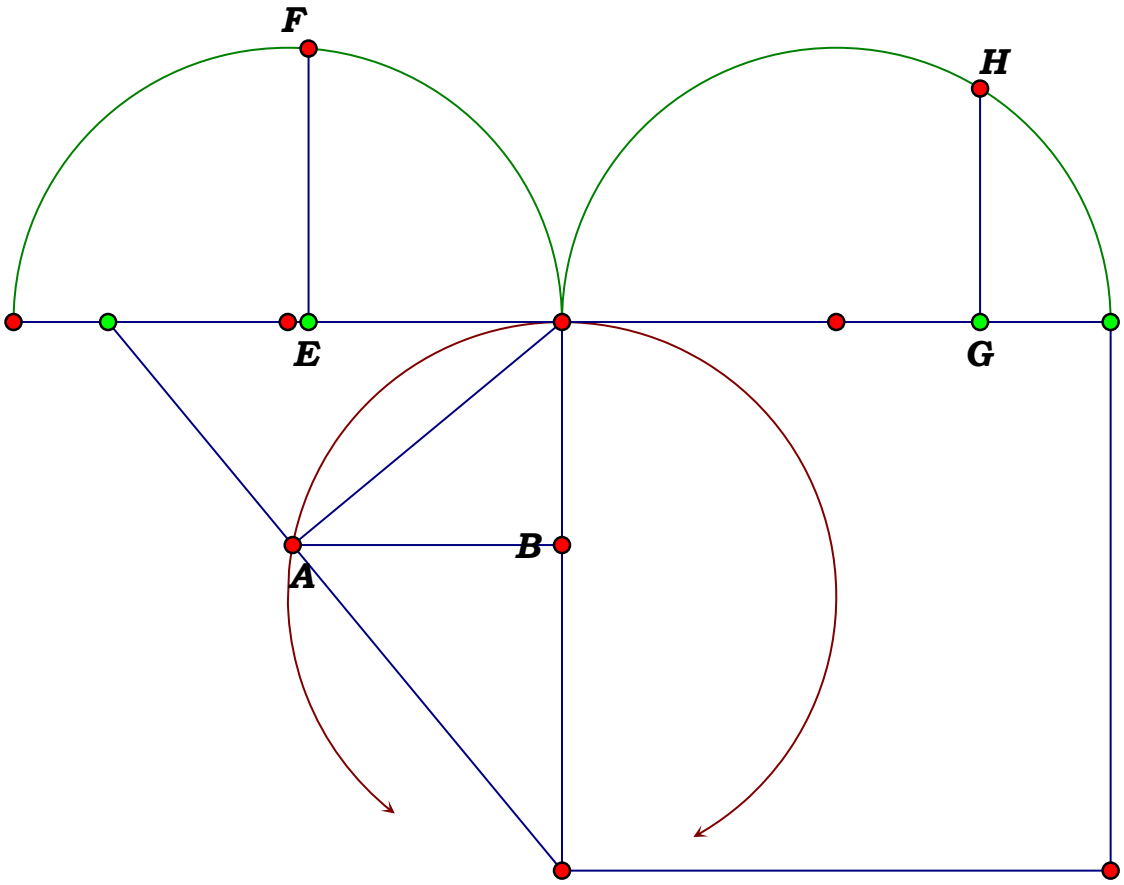
$y_F = 0.49858$

$\sqrt{x_E \cdot (-1 - x_E)} = 0.49858$

$x_G = 0.76220$

$y_H = 0.42574$

$\sqrt{x_G \cdot (1 - x_G)} = 0.42574$



$A = -0.49119$

$B = -0.40658$

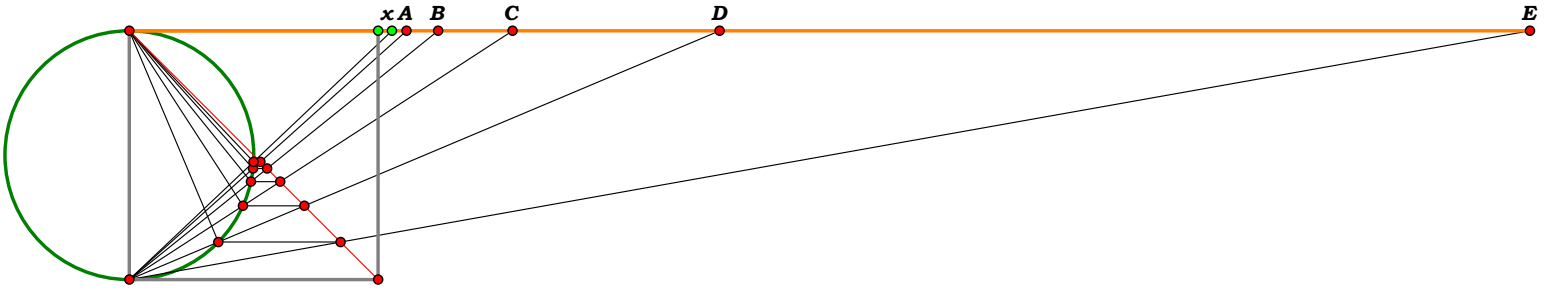
$\frac{A}{\sqrt{A^2}} = -1.00000$

$A \cdot \frac{A}{\sqrt{A^2}} - \sqrt{B \cdot (-1 - B)} = 0.00000$

$Unit = 1.00000$

$x = 1.05548$
$A = 1.11405$
$B = 1.24110$
$C = 1.54034$
$D = 2.37263$
$E = 5.62940$

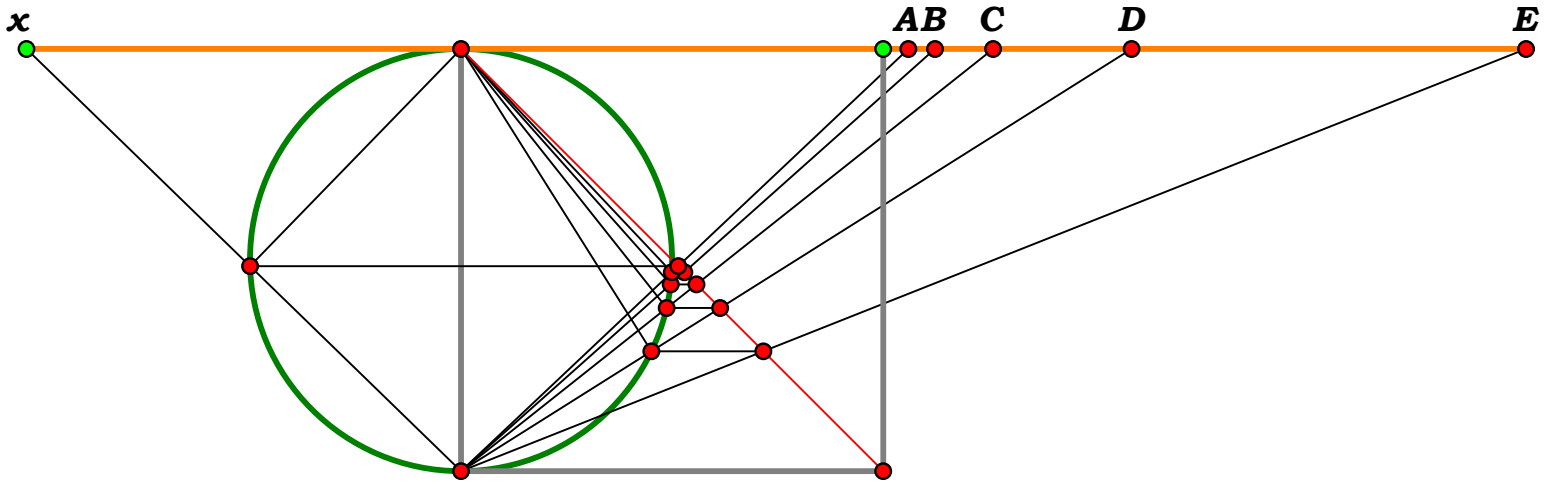
$A - x^2 = 0.00000$
$B - x^4 = 0.00000$
$C - x^8 = 0.00000$
$D - x^{16} = 0.00000$
$E - x^{32} = 0.00000$



$Unit = 1.00000$

$x = -1.02934$
$A = 1.05953$
$B = 1.12261$
$C = 1.26026$
$D = 1.58826$
$E = 2.52256$

$A - x^2 = 0.00000$
$B - x^4 = 0.00000$
$C - x^8 = 0.00000$
$D - x^{16} = 0.00000$
$E - x^{32} = 0.00000$

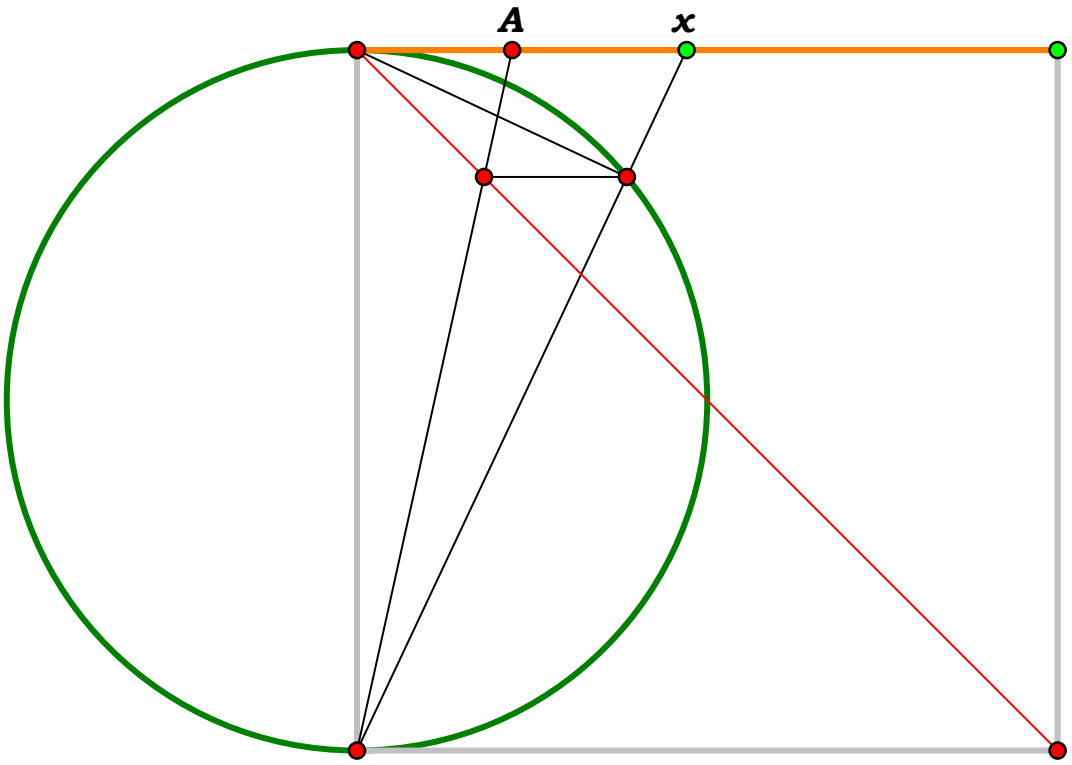


$Unit = 1.00000$

$x = 0.47050$

$A = 0.22137$

$A - x^2 = 0.00000$

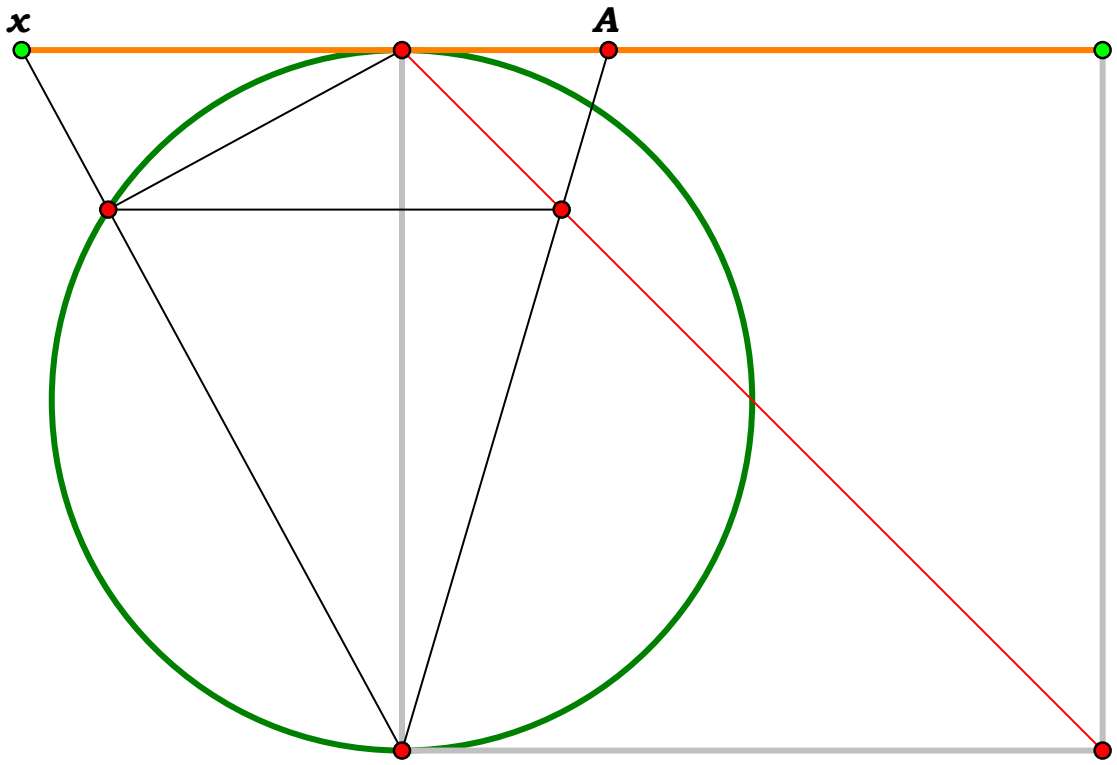


$Unit = 1.00000$

$x = -0.54308$

$A = 0.29493$

$A - x^2 = 0.00000$

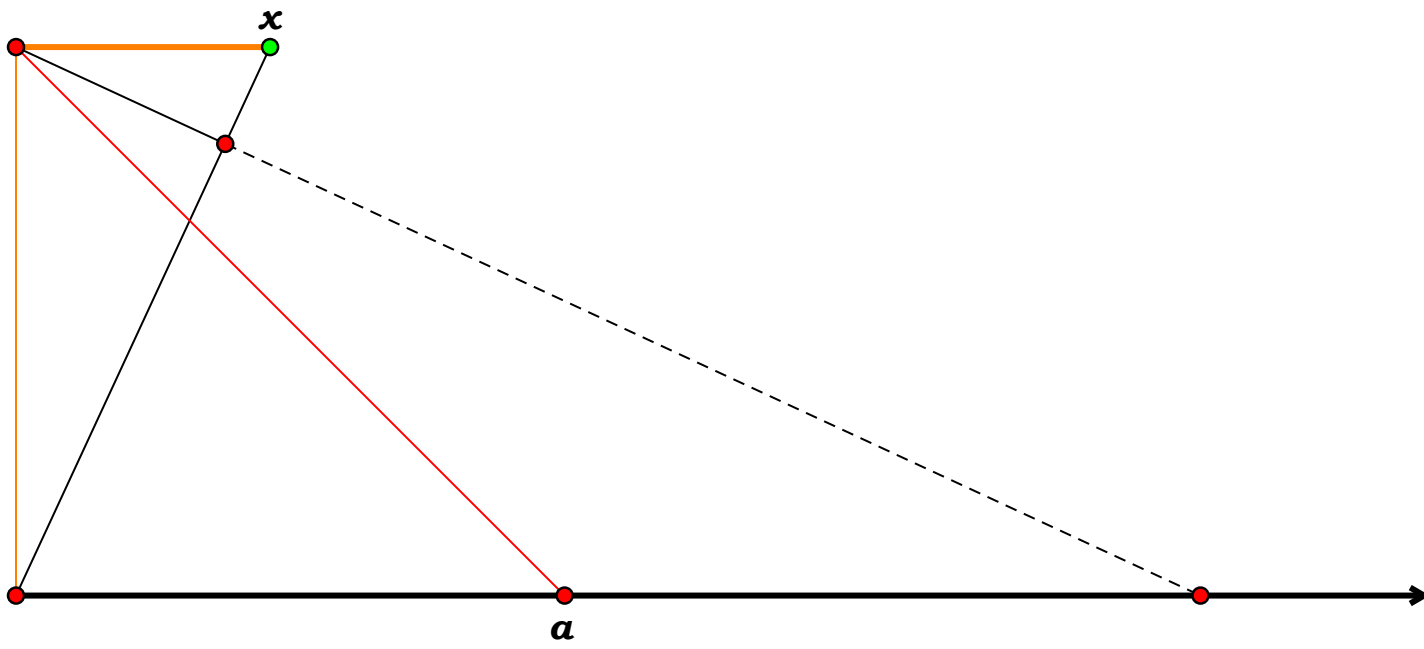


$Unit = 1.00000$

$x = 0.46309$

$\frac{x}{\sqrt{x^2}} = 1.00000$

$a = 1.00000$

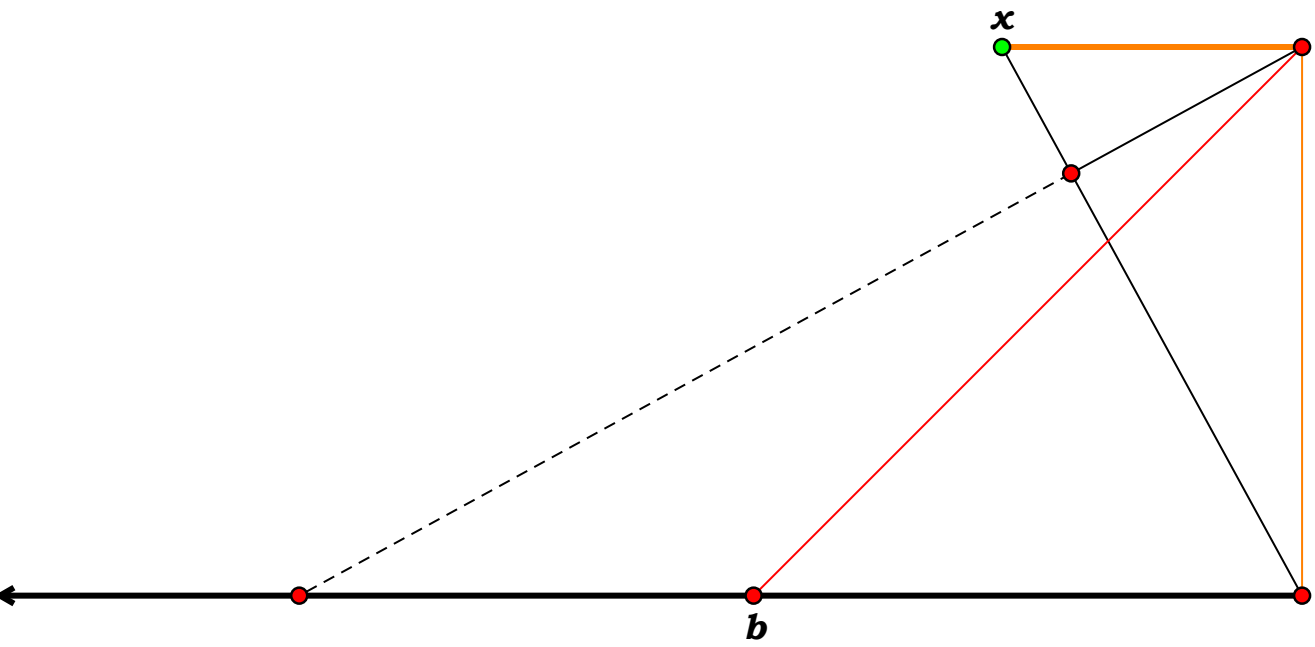


$Unit = 1.00000$

$x = -0.54696$

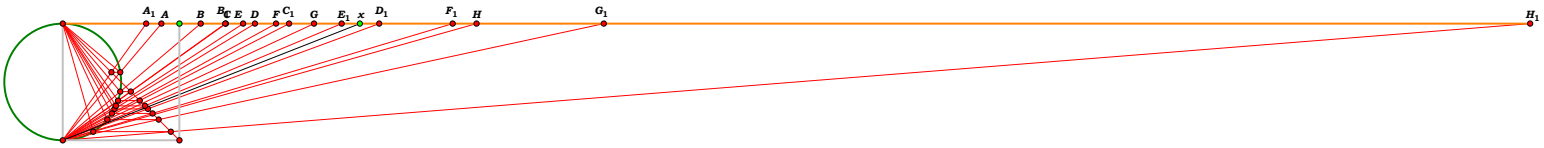
$\frac{x}{\sqrt{x^2}} = -1.00000$

$b = -1.00000$



$Unit = 1.00000$

$x = 2.54604$	$A - \frac{x^2 - 1}{x^2} = 0.00000$	$A_1 = 0.71527$	$A_1 - \frac{(x^2 - 1)^2}{x^4} = 0.00000$	$A_1 - \frac{x^4 - 2 \cdot x^2 + 1}{x^4} = 0.00000$
$A = 0.84573$	$B - \frac{x^2}{x^2 - 1} = 0.00000$	$B_1 = 1.39808$	$B_1 - \frac{x^4}{(x^2 - 1)^2} = 0.00000$	$B_1 - \frac{x^4}{x^4 - 2 \cdot x^2 + 1} = 0.00000$
$B = 1.18241$				
$C = 1.39277$	$C - \frac{x + 1}{x} = 0.00000$	$C_1 = 1.93980$	$C_1 - \frac{(x + 1)^2}{x^2} = 0.00000$	
$D = 1.64681$	$D - \frac{x}{x - 1} = 0.00000$	$D_1 = 2.71200$	$D_1 - \frac{x^2}{(x - 1)^2} = 0.00000$	
$E = 1.54604$	$E - (x - 1) = 0.00000$	$E_1 = 2.39023$	$E_1 - (x - 1)^2 = 0.00000$	$E_1 - (x^2 - 2 \cdot x + 1) = 0.00000$
$F = 1.82804$	$F - \frac{x^2}{x + 1} = 0.00000$	$F_1 = 3.34174$	$F_1 - \frac{x^4}{(x + 1)^2} = 0.00000$	
$G = 2.15327$	$G - \frac{x^2 - 1}{x} = 0.00000$	$G_1 = 4.63657$	$G_1 - \frac{(x^2 - 1)^2}{x^2} = 0.00000$	
$H = 3.54604$	$H - (x + 1) = 0.00000$	$H_1 = 12.57438$	$H_1 - (x + 1)^2 = 0.00000$	$H_1 - (x^2 + 2 \cdot x + 1) = 0.00000$



$Unit = 1.00000$

$x = -0.72064$

$A = -0.92556$

$B = -1.08042$

$C = -0.38765$

$D = 0.41882$

$E = -1.72064$

$F = 1.85902$

$G = 0.66700$

$H = 0.27936$

$A - \frac{x^2 - 1}{x^2} = 0.00000$

$B - \frac{x^2}{x^2 - 1} = 0.00000$

$C - \frac{x + 1}{x} = 0.00000$

$D - \frac{x}{x - 1} = 0.00000$

$E - (x - 1) = 0.00000$

$F - \frac{x^2}{x + 1} = 0.00000$

$G - \frac{x^2 - 1}{x} = 0.00000$

$H - (x + 1) = 0.00000$

$A_1 = 0.85667$

$B_1 = 1.16731$

$C_1 = 0.15027$

$D_1 = 0.17541$

$E_1 = 2.96062$

$F_1 = 3.45596$

$G_1 = 0.44489$

$H_1 = 0.07804$

$A_1 - \frac{(x^2 - 1)^2}{x^4} = 0.00000$

$B_1 - \frac{x^4}{(x^2 - 1)^2} = 0.00000$

$C_1 - \frac{(x + 1)^2}{x^2} = 0.00000$

$D_1 - \frac{x^2}{(x - 1)^2} = 0.00000$

$E_1 - (x - 1)^2 = 0.00000$

$F_1 - \frac{x^4}{(x + 1)^2} = 0.00000$

$G_1 - \frac{(x^2 - 1)^2}{x^2} = 0.00000$

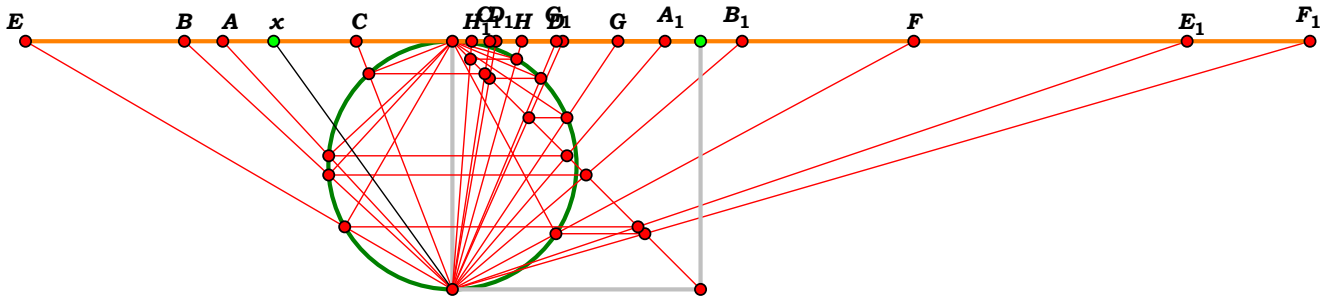
$H_1 - (x + 1)^2 = 0.00000$

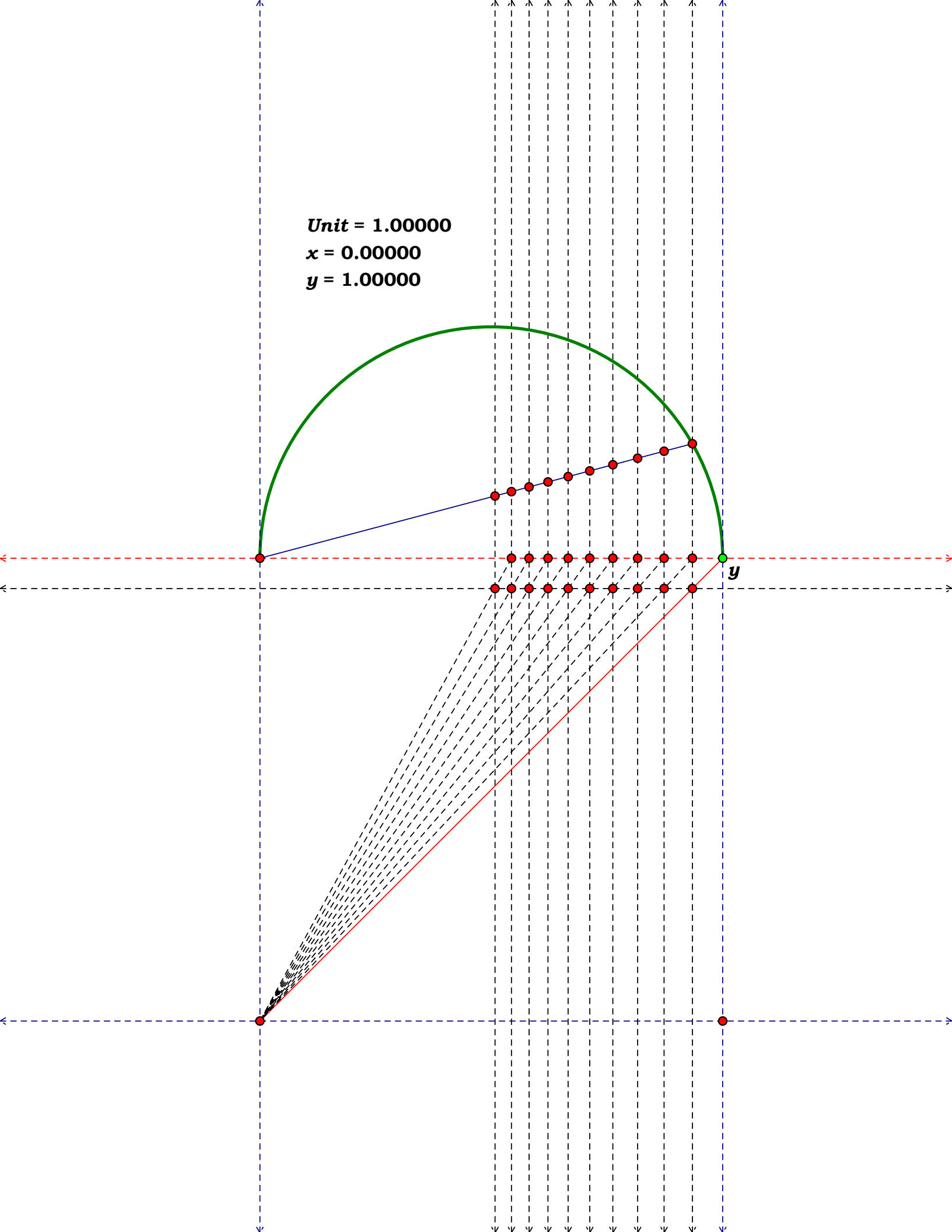
$A_1 - \frac{x^4 - 2 \cdot x^2 + 1}{x^4} = 0.00000$

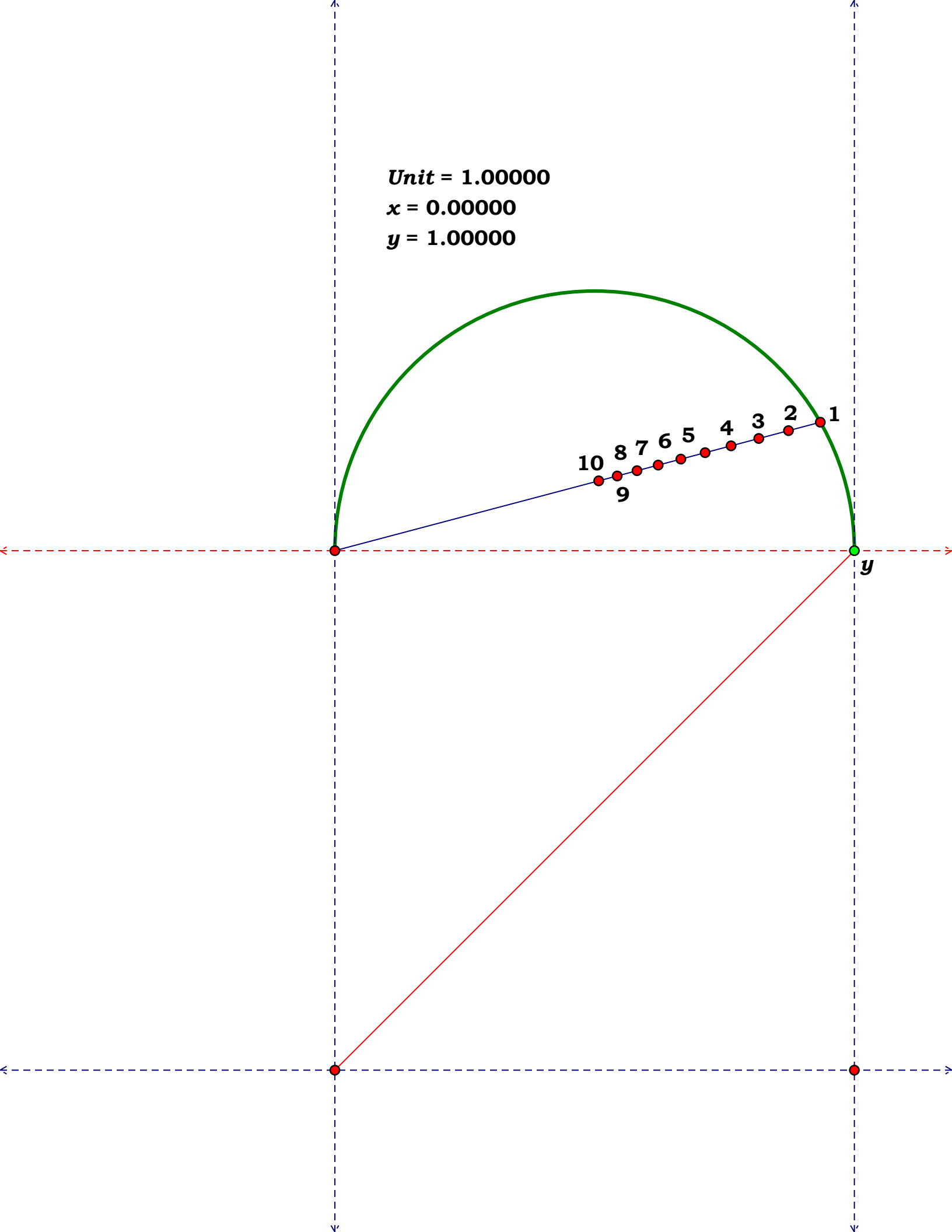
$B_1 - \frac{x^4}{x^4 - 2 \cdot x^2 + 1} = 0.00000$

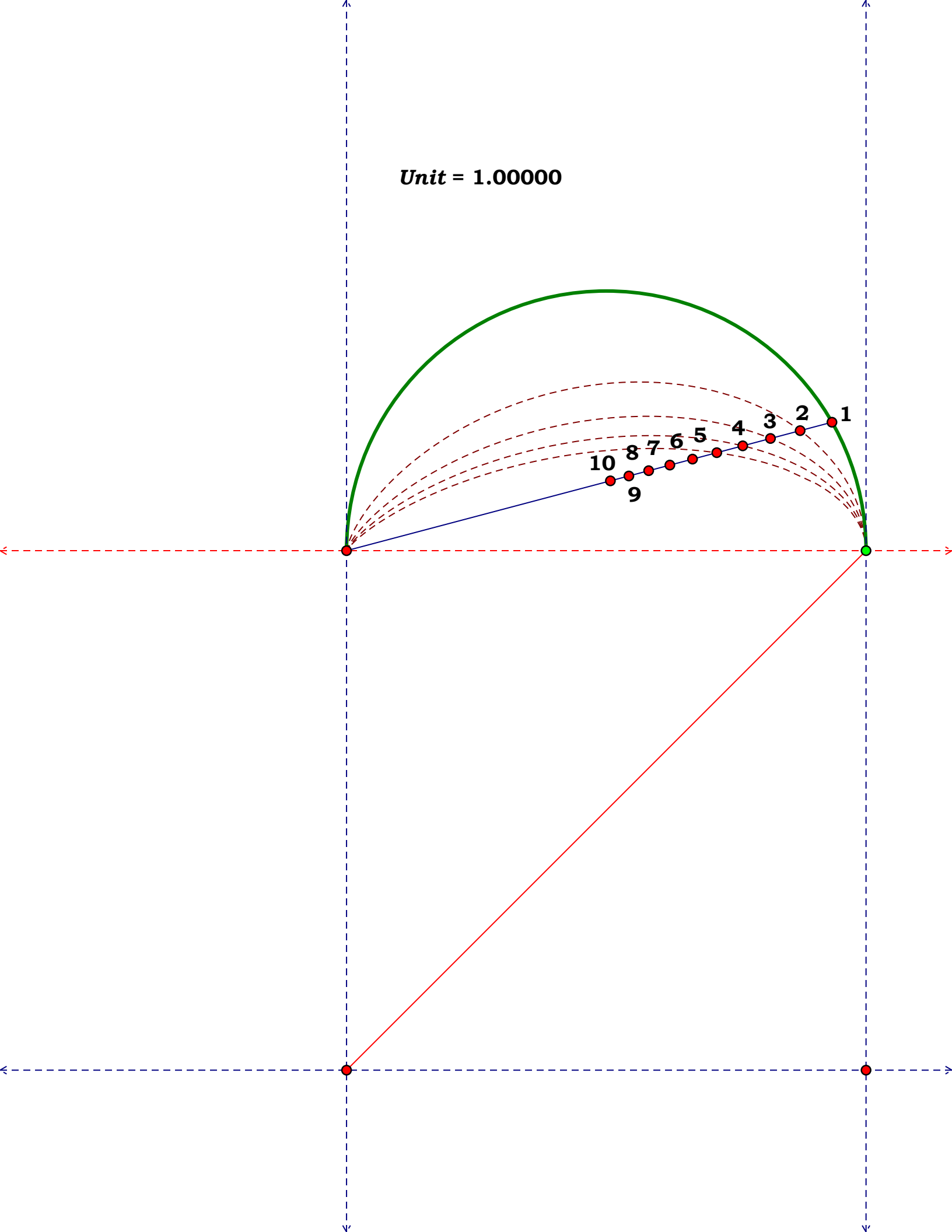
$E_1 - (x^2 - 2 \cdot x + 1) = 0.00000$

$H_1 - (x^2 + 2 \cdot x + 1) = 0.00000$




Unit = 1.00000
x = 0.00000
y = 1.00000
y


Unit = 1.00000
x = 0.00000
y = 1.00000
1
2
3
4
5
6
7
8
9
10
y


Unit = 1.00000
1
2
3
4
5
6
7
8
9
10

$Unit = 1.00000$

$x = 1.15596$

$A = 1.33624$

$B = 1.54464$

$C = 1.78554$

$D = 2.06401$

$a = 0.86508$

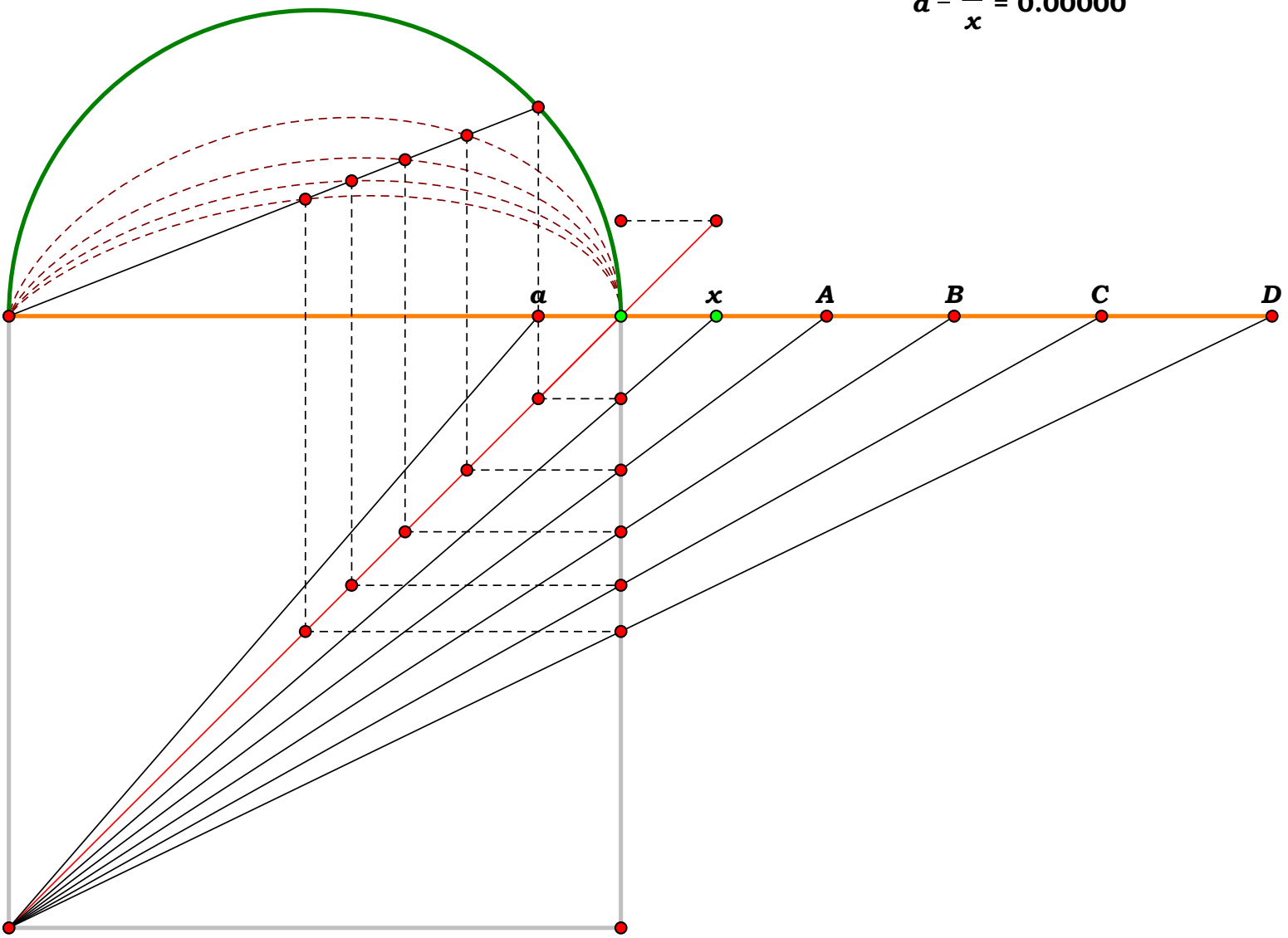
$A - x^2 = 0.00000$

$B - x^3 = 0.00000$

$C - x^4 = 0.00000$

$D - x^5 = 0.00000$

$a - \frac{1}{x} = 0.00000$

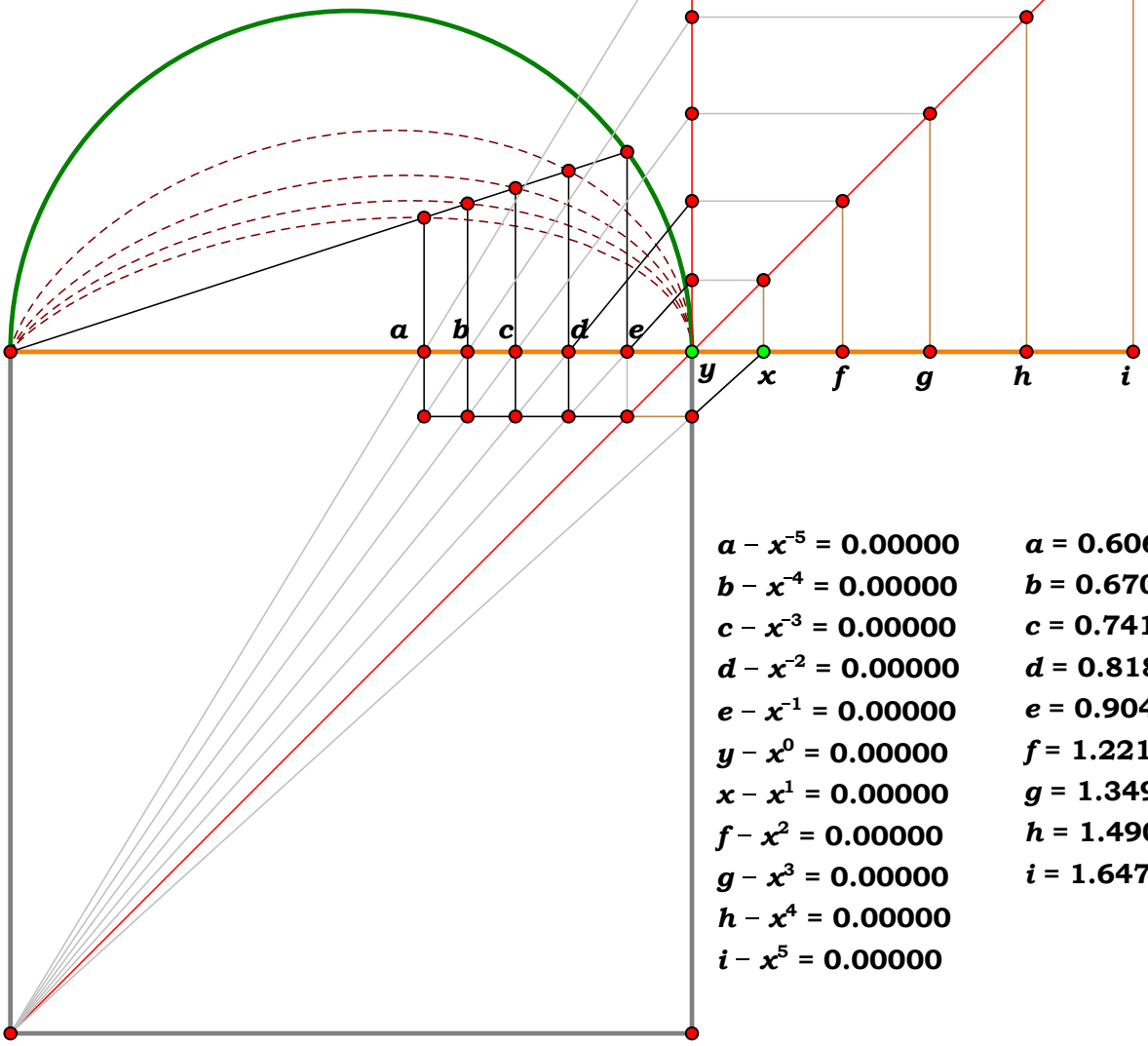


Unit = 1.00000

x = 1.10501

y = 1.00000

e = 0.90497



$x - x^1 = 0.00000$

$y - x^0 = 0.00000$

$e - x^{-1} = 0.00000$

$a - x^{-5} = 0.00000$

$b - x^{-4} = 0.00000$

$c - x^{-3} = 0.00000$

$d - x^{-2} = 0.00000$

$e - x^{-1} = 0.00000$

$y - x^0 = 0.00000$

$x - x^1 = 0.00000$

$f - x^2 = 0.00000$

$g - x^3 = 0.00000$

$h - x^4 = 0.00000$

$i - x^5 = 0.00000$

a = 0.60697

b = 0.67071

c = 0.74114

d = 0.81897

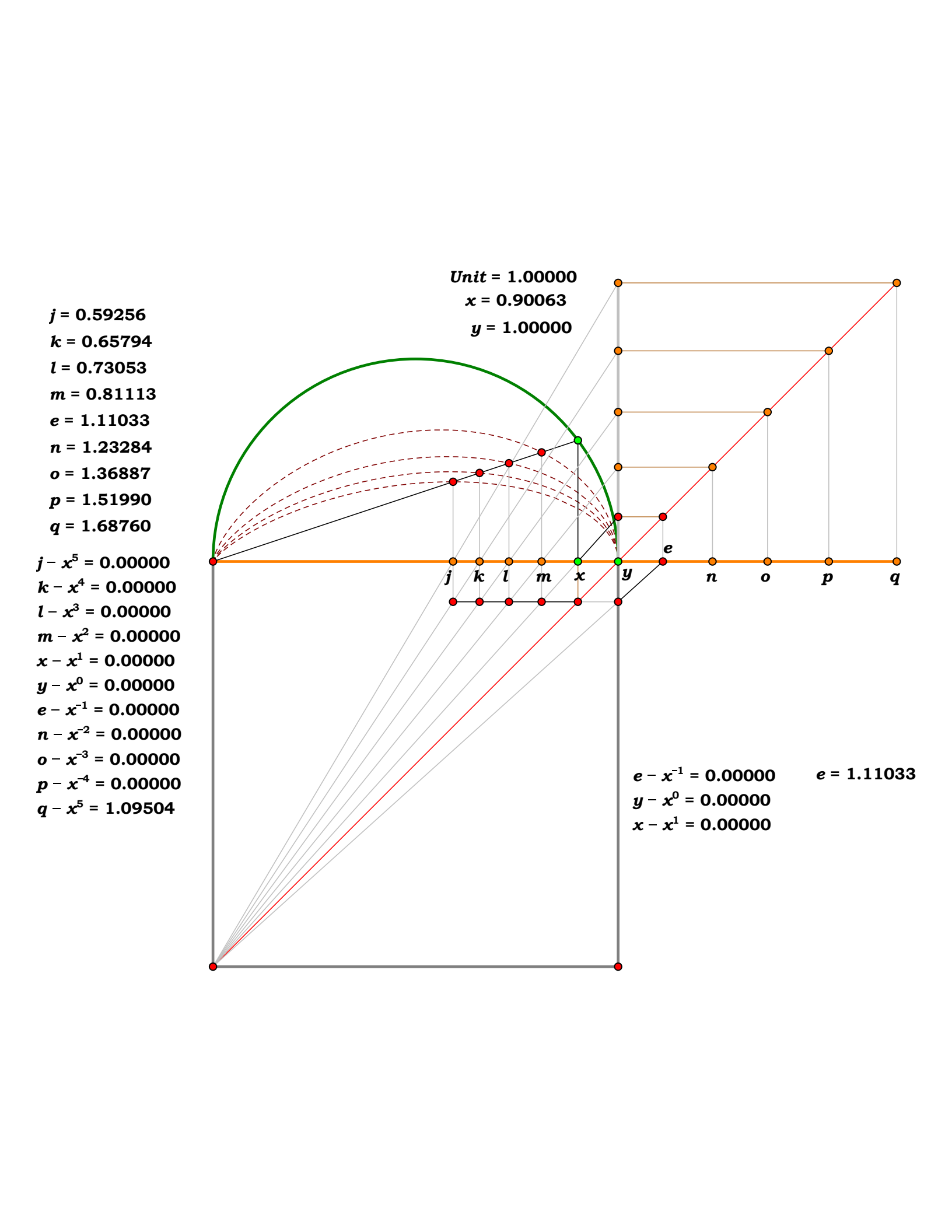
e = 0.90497

f = 1.22105

g = 1.34928

h = 1.49097

i = 1.64754


Unit = 1.00000
x = 0.90063
y = 1.00000
j = 0.59256
k = 0.65794
l = 0.73053
m = 0.81113
e = 1.11033
n = 1.23284
o = 1.36887
p = 1.51990
q = 1.68760
j − x^5 = 0.00000
k − x^4 = 0.00000
l − x^3 = 0.00000
m − x^2 = 0.00000
x − x^1 = 0.00000
y − x^0 = 0.00000
e − x^-1 = 0.00000
n − x^-2 = 0.00000
o − x^-3 = 0.00000
p − x^-4 = 0.00000
q − x^5 = 1.09504
e − x^-1 = 0.00000
y − x^0 = 0.00000
x − x^1 = 0.00000
e = 1.11033
j
k
l
m
x
y
e
n
o
p
q